Mohsen Yarmohammadi

List of Publications by Year in Descending Order

92 papers	836 citations	18 h-index	20 g-index
94 ext. papers	1,031 ext. citations	2.6 avg, IF	5.7 L-index

#	Paper	IF	Citations
92	Rotating exchange field effect on the electron energy loss spectrum of black phosphorene: anisotropic blue and red shift phenomena. *Journal Physics D: Applied Physics*, **2021**, 54, 045105	3	1
91	Anisotropic ferroelectric distortion effects on the RKKY interaction in topological crystalline insulators. *Scientific Reports*, **2021**, 11, 5273	4.9	1
90	Systematic competition between strain and electric field stimuli in tuning EELS of phosphorene. *Scientific Reports*, **2021**, 11, 3716	4.9	1
89	Dynamic mean-field theory for dense spin systems at infinite temperature. *Physical Review Research*, **2021**, 3,	3.9	1
88	Spin-splitting effects on the interband optical conductivity and activity of phosphorene. *Scientific Reports*, **2020**, 10, 9201	4.9	5
87	Linear interband optical refraction and absorption in strained black phosphorene. *Journal of Physics Condensed Matter*, **2020**, 32, 465301	1.8	3
86	Electrical conductivity of statically perturbed topological crystalline insulators. *Journal Physics D: Applied Physics*, **2020**, 53, 425301	3	1
85	Electric field tuning of the properties of monolayer hexagonal boron phosphide. *Journal of Applied Physics*, **2020**, 128, 215703	2.5	4
84	Effective low-energy RKKY interaction in doped topological crystalline insulators. *Physical Review B*, **2020**, 102,	3.3	5
83	Anisotropic basic electronic properties of strained black phosphorene. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 124, 114323	3	5
82	On the bias voltage and staggered potential effects in tuning anisotropic temperature-dependent electrical conductivity of topological crystalline insulator thin films. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 124, 114330	3	1
81	Triaxial strain engineering of magnetic phase in phosphorene. *Journal of Applied Physics*, **2019**, 126, 063903	2.5	3
80	Strain engineering of optical activity in phosphorene.. *RSC Advances*, **2019**, 9, 19006-19015	3.7	17
79	Optical interband transitions in strained phosphorene. *Physical Chemistry Chemical Physics*, **2019**, 21, 15133-15141	3.6	11
78	Perturbation-induced magnetic phase transition in bilayer phosphorene. *Journal of Applied Physics*, **2019**, 125, 213903	2.5	8
77	Blue shift in the interband optical transitions of gated monolayer black phosphorus. *Journal of Applied Physics*, **2019**, 125, 193101	2.5	4
76	Strain-induced electronic phase transition in phosphorene: A Green function study. *Chemical Physics*, **2019**, 522, 249-255	2.3	12

75	Magneto-EELS of armchair boronitrene nanoribbons. *RSC Advances*, **2019**, 9, 2829-2835	3.7	4
74	Real-space exciton distribution in strained-siligraphene g-SiC7. *Journal of Applied Physics*, **2019**, 126, 063104	2.5	5
73	A methodical study of quantum phase engineering in topological crystalline insulator SnTe and related alloys. *Physical Chemistry Chemical Physics*, **2019**, 21, 21633-21650	3.6	12
72	Modified tailoring the electronic phase and emergence of midstates in impurity-imbrued armchair graphene nanoribbons. *Scientific Reports*, **2019**, 9, 10651	4.9	5
71	Perpendicular electric field effects on the propagation of electromagnetic waves through the monolayer phosphorene. *Journal of Magnetism and Magnetic Materials*, **2019**, 491, 165629	2.8	6
70	Electro-optical properties of a pressure-induced g□iC7 sheet from many-body perturbation theory. *Physical Review B*, **2019**, 100,	3.3	9
69	Enhancement of the anisotropic thermoelectric power factor of topological crystalline insulator SnTe and related alloys via external perturbations. *Journal of Materials Chemistry A*, **2019**, 7, 25573-25585	13	18
68	□Borophene becomes a semiconductor and semimetal via a perpendicular electric field and dilute charged impurity. *Physical Chemistry Chemical Physics*, **2019**, 21, 21790-21797	3.6	20
67	Impurity-tuning of phase transition and mid-state in 2D spin Lieb lattice. *Physica E: Low-Dimensional Systems and Nanostructures*, **2019**, 105, 56-61	3	5
66	Magnonic heat transport in the Lieb lattice. *Journal of Magnetism and Magnetic Materials*, **2019**, 469, 623-628	2.8	3
65	Anisotropic magneto-thermoelectric properties of single-layer dilute charged impurity-infected black phosphorus. *Physica E: Low-Dimensional Systems and Nanostructures*, **2019**, 107, 11-17	3	13
64	Linear magneto-electron-light interaction in ultranarrow armchair graphene and boronitrene nanoribbons. *Diamond and Related Materials*, **2019**, 92, 86-91	3.5	7
63	Perturbed magnonic thermodynamic properties of the impurity-infected Lieb lattice. *Journal of Magnetism and Magnetic Materials*, **2019**, 474, 137-143	2.8	1
62	Tuning thermoelectric transport in phosphorene through a perpendicular magnetic field. *Chemical Physics*, **2019**, 519, 1-5	2.3	21
61	Zeeman magnetic field effect on the thermodynamic properties of armchair and zigzag phosphorene. *Materials Research Express*, **2019**, 6, 015903	1.7	4
60	Combined electric and magnetic field-induced anisotropic tunable electronic phase transition in AB-stacked bilayer phosphorene. *Physica E: Low-Dimensional Systems and Nanostructures*, **2019**, 106, 250-257	3	21
59	Interplay of orbital hopping and perpendicular magnetic field in anisotropic phase transitions for Bernal bilayer graphene and hexagonal boron-nitride. *Physical Chemistry Chemical Physics*, **2018**, 21, 238-245	3.6	17
58	Impurity-induced anisotropic semiconductor-semimetal transition in monolayer biased black phosphorus. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2018**, 382, 1885-1889	2.3	18

57	Spectral iterative method and convergence analysis for solving nonlinear fractional differential equation. *Journal of Computational Physics*, **2018**, 359, 436-450	4.1	9
56	Electronic Collective Mode Behaviors in Doped and Gated Armchair-Type Graphene Nanoribbons. *Plasmonics*, **2018**, 13, 1963-1969	2.4	
55	The role of electronic dopant on full band in-plane RKKY coupling in armchair graphene nanoribbons-magnetic impurity system. *Journal of Magnetism and Magnetic Materials*, **2018**, 454, 362-367	2.8	8
54	Insulator-semimetallic transition in quasi-1D charged impurity-infected armchair boron-nitride nanoribbons. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2018**, 382, 995-999	2.3	6
53	Coherent control of the route of magnetic phases in quasi-1D armchair graphene nanoribbons via doping in the presence of electronic correlations. *Solid State Communications*, **2018**, 271, 21-28	1.6	11
52	Invalidity of the Fermi liquid theory and magnetic phase transition in quasi-1D dopant-induced armchair-edged graphene nanoribbons. *Journal of Magnetism and Magnetic Materials*, **2018**, 452, 157-163	2.8	4
51	Effect of Gap Parameter on Electronic Heat Capacity and Magnetic Susceptibility of Graphene in the Presence of Holstein Phonons. *Journal of Superconductivity and Novel Magnetism*, **2018**, 31, 1293-1299	1.5	1
50	Direction-dependent electronic phase transition in magnetic field-induced gated phosphorene. *Journal of Magnetism and Magnetic Materials*, **2018**, 465, 646-650	2.8	20
49	Pauli magnetic susceptibility of doped and biased phosphorene in the presence of Zeeman magnetic field and dilute charged impurity. *Superlattices and Microstructures*, **2018**, 122, 453-460	2.8	16
48	Zeeman-magnetic-field□induced magnetic phase transition in doped armchair boron-nitride nanoribbons. *Europhysics Letters*, **2018**, 122, 17005	1.6	20
47	Anisotropic electronic heat capacity and electrical conductivity of monolayer biased impurity-infected black phosphorus. *Solid State Communications*, **2018**, 280, 39-44	1.6	21
46	Spin- and valley-dependent electrical conductivity of ferromagnetic group-IV 2D sheets in the topological insulator phase. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 97, 340-346	3	6
45	On the intra- and interband plasmon modes in doped armchair graphene nanoribbons. *Superlattices and Microstructures*, **2018**, 113, 576-584	2.8	3
44	The Kubo-Greenwood spin-dependent electrical conductivity of 2D transition-metal dichalcogenides and group-IV materials: A Green□s function study. *Journal of Magnetism and Magnetic Materials*, **2018**, 451, 57-64	2.8	13
43	On the influence of dilute charged impurity and perpendicular electric field on the electronic phase of phosphorene: Band gap engineering. *Europhysics Letters*, **2018**, 124, 27001	1.6	22
42	Magnon-impurity interaction effect on the magnonic heat capacity of the Lieb lattice. *AIP Advances*, **2018**, 8, 125317	1.5	3
41	Combined effect of the perpendicular magnetic field and dilute charged impurity on the electronic phase of bilayer AA-stacked hydrogenated graphene. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2018**, 382, 3298-3305	2.3	23
40	Perturbation tuning of plasmon modes in semiconductor armchair nanoribbons. *Physical Review B*, **2018**, 98,	3.3	18

39	Charged impurity-tuning of midgap states in biased Bernal bilayer black phosphorus: an anisotropic electronic phase transition. *Physical Chemistry Chemical Physics*, **2018**, 20, 25044-25051	3.6	18
38	A controllable magneto-topological property and band gap engineering in 2D ferromagnetic Lieb lattice. *Journal of Magnetism and Magnetic Materials*, **2018**, 464, 103-107	2.8	10
37	Direction-dependent electronic thermal conductivity and thermopower of single-layer black phosphorus in the presence of bias voltage and dilute charged impurity. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 103, 76-80	3	12
36	Magneto-thermodynamic properties of gapped graphene-like structures. *Indian Journal of Physics*, **2017**, 91, 659-664	1.4	2
35	Spin-valley Hall conductivity of doped ferromagnetic silicene under strain. *Chinese Physics B*, **2017**, 26, 017203	1.2	5
34	The Effects of Electric and Exchange Magnetic Fields on Spin Energy Dispersion, Electronic Heat Capacity and Magnetic Susceptibility of Monolayer Silicene. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 1859-1866	1.5	1
33	The Effect of Exchange Magnetic Field on Spin Magnetic Susceptibility of Monolayer and AB-Stacked Bilayer MoS2. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 1905-1913	1.5	0
32	Spin heat capacity of monolayer and AB-stacked bilayer MoS 2 in the presence of exchange magnetic field. *Superlattices and Microstructures*, **2017**, 104, 331-340	2.8	5
31	Electronic miniband structure, heat capacity and magnetic susceptibility of monolayer and bilayer silicene in TI, VSPM and BI regimes. *Physics Letters, Section A: General, Atomic and Solid State Physics* , **2017**, 381, 1261-1267	2.3	18
30	The effect of Rashba spin□orbit coupling on the spin- and valley-dependent electronic heat capacity of silicene. *RSC Advances*, **2017**, 7, 10650-10659	3.7	13
29	The electronic properties, electronic heat capacity and magnetic susceptibility of monolayer boron nitride graphene-like structure in the presence of electron-phonon coupling. *Solid State Communications*, **2017**, 253, 57-62	1.6	10
28	Spin magnetic susceptibility of ferromagnetic silicene in the presence of Rashba spin-orbit coupling. *AIP Advances*, **2017**, 7, 035211	1.5	3
27	Transport and Magnetoresistance in Topological Insulator-Based Ferromagnetic/Insulator/Ferromagnetic Junction in the Presence of External Electric Field. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 2693-2697	1.5	1
26	Spin- and valley-dependent electronic band structure and electronic heat capacity of ferromagnetic silicene in the presence of strain, exchange field and Rashba spin-orbit coupling. *Journal of Magnetism and Magnetic Materials*, **2017**, 439, 203-212	2.8	15
25	Optical Absorption of SiC, BN, and BeO Nanosheets in Holstein Model. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 2435-2444	1.5	1
24	Electronic heat capacity and magnetic susceptibility of ferromagnetic silicene sheet under strain. *Solid State Communications*, **2017**, 250, 84-91	1.6	22
23	The Effective Mass of Dirac Fermions and Spin-Dependent Thermodynamic Properties of Monolayer Ferromagnetic MoS2 in the Presence of Rashba Spin-Orbit Coupling. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 3137-3141	1.5	2
22	Controlling Thermodynamic Properties of Ferromagnetic Group-IV Graphene-Like Nanosheets by Dilute Charged Impurity. *Communications in Theoretical Physics*, **2017**, 67, 569	2.4	4

21	Orbital electronic heat capacity of hydrogenated monolayer and bilayer graphene. *Chinese Physics B*, **2017**, 26, 026502	1.2	8
20	The effects of Rashba spin–orbit coupling and Holstein phonons on thermodynamic properties of BN-doped graphene. *International Journal of Modern Physics B*, **2017**, 31, 1750045	1.1	4
19	Orbital magneto-electronic heat capacity of hydrogenated graphene in the presence of dilute charged impurity. *International Journal of Modern Physics B*, **2017**, 31, 1750053	1.1	2
18	Sequence dependency of the thermodynamic properties of long DNA double-strands. *RSC Advances* , **2017**, 7, 48486-48493	3.7	
17	The Dilute Charged Impurity Effects on Electronic Heat Capacity and Magnetic Susceptibility of Ferromagnetic Silicene Sheet. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 681-689	1.5	1
16	The effects of strain on DC transverse and spin-valley Hall conductivity of ferromagnetic MoS2 and silicene. *Journal of Magnetism and Magnetic Materials*, **2017**, 426, 621-628	2.8	22
15	The Effect of Dilute Charged Impurity on the Electronic Heat Capacity and Magnetic Susceptibility of Ferromagnetic MoS2. *Journal of Superconductivity and Novel Magnetism*, **2017**, 30, 943-949	1.5	2
14	Thermodynamic Properties of Gapped Graphene in the Presence of a Transverse Magnetic Field by Considering Holstein Phonons. *Journal of Electronic Materials*, **2017**, 46, 747-757	1.9	7
13	Bound states of Dirac fermions in monolayer gapped graphene in the presence of local perturbations. *Chinese Physics B*, **2016**, 25, 068105	1.2	18
12	Role of Spin–Orbit Interaction and Impurity Doping in Thermodynamic Properties of Monolayer MoS2. *Journal of Electronic Materials*, **2016**, 45, 4958-4965	1.9	23
11	Magnon heat capacity and magnetic susceptibility of the spin Lieb lattice. *Journal of Magnetism and Magnetic Materials*, **2016**, 417, 208-213	2.8	18
10	Optical conductivity of the spin Lieb nanolattice. *Journal of Magnetism and Magnetic Materials*, **2016**, 419, 240-244	2.8	6
9	Optical conductivity of AA-stacked bilayer graphene in presence of bias voltage beyond Dirac approximation. *Indian Journal of Physics*, **2016**, 90, 811-817	1.4	9
8	Dynamical thermoelectric properties of doped AA-stacked bilayer graphene. *Superlattices and Microstructures*, **2016**, 89, 15-25	2.8	12
7	Dynamical thermal conductivity of the spin Lieb lattice. *Solid State Communications*, **2016**, 234-235, 14-20	1.6	13
6	Dynamical thermal conductivity of bilayer graphene in the presence of bias voltage. *Physica E: Low-Dimensional Systems and Nanostructures*, **2016**, 75, 125-135	3	12
5	Controlling dynamical thermal transport of biased bilayer graphene by impurity atoms. *AIP Advances*, **2016**, 6, 075121	1.5	5
4	Strain effects on the optical conductivity of gapped graphene in the presence of Holstein phonons beyond the Dirac cone approximation. *AIP Advances*, **2016**, 6, 085008	1.5	22

3	The effects of impurity doping on the optical properties of biased bilayer graphene. *Optical Materials*, **2016**, 57, 8-13	3.3	9
2	Impurity effects on electrical conductivity of doped bilayer graphene in the presence of a bias voltage. *Chinese Physics B*, **2016**, 25, 076102	1.2	5
1	Impurity doping effects on the orbital thermodynamic properties of hydrogenated graphene, graphane, in Harrison model. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2016** , 380, 4062-4069	2.3	20