Arash Boochani

List of Publications by Year
in descending order

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80	1,349	394421 19	361022 35
papers	citations	h-index	g-index

80	80	80	1271
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Thermodynamic, mechanical stabilities and thermoelectric behavior of the XVSi (Xâ€‰=â€‰Co, Rh) half-Heuslers. Indian Journal of Physics, 2022, 96, 1045-1057.	1.8	1
2	The effect of Fe impurity on electronic and optical properties of graphene-like InAs: a DFT-based study. Indian Journal of Physics, 2022, 96, 1705-1714.	1.8	2
3	Huge Figure of Merit, Half-Metallic, and Optical Properties in n-Type CoVSb Heuslerene. International Journal of Thermophysics, 2022, 43, 1.	2.1	4
4	GdPtBi Heuslerene: mechanical stability, half-metallic, magneto-optic, and thermoelectric properties by DFT. Philosophical Magazine, 2022, 102, 887-901.	1.6	8
5	Electronic, optical and thermoelectric properties of BN-Be(8,0) nanotube: DFT study. Solid State Communications, 2022, , 114822.	1.9	0
6	Evaluation of electronic and optical behavior of the interface of Co₂FeAl/AlN heusler alloy. Materials Research Express, 2022, 9, 065004.	1.6	0
7	Electronic, optical and thermoelectric properties of MoS₂-GaN interface. International Journal of Modern Physics B, 2022, 36, .	2.0	1
8	Optical, half-metallic and thermoelectric properties of the Co2TaAl [001] film. Indian Journal of Physics, 2021, 95, 1709-1721.	1.8	3
9	Thermodynamic phase diagram and thermoelectric properties of LiMgZ (Zâ€‰=â€‰P, As, Bi): ab initio method study. Philosophical Magazine, 2021, 101, 369-386.	1.6	17
10	Electronic structure and magnetic properties of the CoFeMnZ (Z=As and Si) Heuslers by XAS, XMCD and MOKE: A DFT study. Materials Today Communications, 2021, 26, 101773.	1.9	4
11	Hydrogen effect on <scp>halfâ€metallic</scp> and thermoelectric properties of <scp>CoRhMnSi</scp> [001] film. International Journal of Energy Research, 2021, 45, 13055-13070.	4.5	8
12	Investigation of the stability, electronic structure, and magnetic properties of Sc2VZ (ZÂ=ÂGe, Si) Heusler alloys: First-principles calculations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 267, 115096.	3.5	2
13	Influence of deposition time on the optical and morphological properties of silverâ€“copper thin films: experimental and statistical studies. Optical and Quantum Electronics, 2021, 53, 1.	3.3	7
14	Interfacial Rashba band splitting in the organohalide lead perovskites: an ab-initio study. Semiconductor Science and Technology, 2021, 36, 075010.	2.0	1
15	Mechanical and thermodynamic stabilities, half-metallic and thermoelectric comparison between CoFeMnZ (Zâ€‰=â€‰Si, Ge) Heuslers by DFT. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	2.3	2
16	Electronic and optical properties of Fe doped GaN graphene based: Using DFT. Computational Condensed Matter, 2021, 28, e00569.	2.1	4
17	Half-metallic, magneto-optic, and thermoelectric properties of CoRuVZ (Z=Al, Ga). Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 414, 127622.	2.1	11
18	Electronic, optical, magneto-optical, and thermoelectric properties of the SrS graphene-like under Cr impurity. Chemical Physics, 2021, 551, 111355.	1.9	9

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19	Characterization of halide perovskite/titania interfaces as a function of the interlayer composition: A theoretical study. Journal of Physics and Chemistry of Solids, 2020, 138, 109243.	4.0	2
20	Thermodynamic Phase Diagram, Half-Metallic and Optical Properties of the Zr2TiSi [111] Films Based on DFT. Silicon, 2020, 12, 2165-2178.	3.3	3
21	Thermoelectric and optical properties of the SrS graphene by DFT. Philosophical Magazine, 2020, 100, 3108-3124.	1.6	8
22	Electronic, optical and thermoelectric properties of the WS2â€“GaN interfaces: a DFT study. International Nano Letters, 2020, 10, 249-261.	5.0	2
23	Optical and electronic properties of zigzag boron nitride nanotube (6,0): DFT study. International Nano Letters, 2020, 10, 293-301.	5.0	2
24	Vanadium effect on the electronic and thermoelectric properties of ScPtBi compound. International Nano Letters, 2020, 10, 225-234.	5.0	1
25	Thermoelectric and half-metallic behavior of the Co2TaAl: a DFT study. International Nano Letters, 2020, 10, 81-88.	5.0	2
26	Mechanical stability and thermoelectric properties of the PdZrTiAl quaternary Heusler: A DFT study. Solid State Communications, 2020, 308, 113838.	1.9	29
27	Multiscale Surface Microtexture Analysis of CuNPs@a-C:H Thin Films. Industrial & Engineering Chemistry Research, 2020, 59, 22520-22532.	3.7	7
28	Surface micromorphology analysis of Cu/Ni nanocomposite thin films by power spectra density and fractal geometry. Materials Science-Poland, 2020, 38, 328-333.	1.0	1
29	Structural, Half-Metallic, Optical, and Thermoelectric Study on the Zr2TiX (X = Al, Ga, Ge, Si) Heuslers: by DFT. Silicon, 2019, 11, 501-511.	3.3	1
30	Nickel Nanoparticle Catalyzed Growth of Multiwall CNTs on Copper thin Films Substrate. Protection of Metals and Physical Chemistry of Surfaces, 2019, 55, 677-681.	1.1	0
31	The Cr impurity effect on the optical properties of the Ti2N graphene-like materials: a DFT study. International Nano Letters, 2019, 9, 289-298.	5.0	1
32	Half-Metallic, Thermoelectric, Optical, and Thermodynamic Phase Stability of RbBaB(001) Film: A DFT Study. International Journal of Thermophysics, 2019, 40, 1.	2.1	8
33	Thermodynamic Stability, Half-Metallic and Optical Properties of Sc 2 CoSi [001] Film: a DFT Study. Communications in Theoretical Physics, 2019, 71, 455.	2.5	6
34	The electronic and optical properties of MgO mono-layer: Based on GGA-mBJ. Results in Physics, 2019, 12, 2038-2043.	4.1	51
35	Ti₂VGe Heuslerene: theoretical prediction of a novel 2D material. Journal of Materials Chemistry C, 2019, 7, 13559-13572.	5.5	36
36	Thermodynamic phase diagram, magneto-optic and thermoelectric properties of the AlXN (X = Co, Fe) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.6	3

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37	The MN effect on Electronic, optical and thermoelectric properties of Ti2N graphene: by DFT. Chinese Journal of Physics, 2019, 57, 240-249.	3.9	1
38	The band offset, Half-metallic and optical behavior in the CrSb/KCl [0â€¯0â€¯1] interface: By DFT calculation. Chemical Physics Letters, 2019, 714, 53-60.	2.6	0
39	Vanadium impurity effects on optical properties of Ti3N2 mono-layer: An ab-initio study. Results in Physics, 2018, 9, 270-274.	4.1	2
40	Effect of Si and Ge Surface Doping on the Be2C Monolayer: Case Study on Electrical and Optical Properties. Silicon, 2018, 10, 1893-1902.	3.3	3
41	The Vanadium Effect on Electronic and Optical Response of MoS2 Graphene-Like: Using DFT. Silicon, 2018, 10, 2855-2863.	3.3	13
42	Electronic and optical properties of graphene-like InAs: An ab initio study. European Physical Journal Plus, 2018, 133, 1.	2.6	3
43	The Vanadium effect on the electronic and optical properties of Ti3C2 graphene like: Based DFT. Results in Physics, 2018, 8, 1209-1215.	4.1	7
44	Prevailing Cu-C Nanocomposite over Cu NPs for CNTs Growth: A Catalyst Study on Silicon Substrate. Silicon, 2018, 10, 907-912.	3.3	3
45	The band offset barrier and optical properties calculation of Co2VGa/GaAs(001) interfaces: A DFT study. International Journal of Modern Physics B, 2018, 32, 1750270.	2.0	1
46	Thermodynamic stability, half-metallic and optical nature of graphene-like Mn2 ZrZ (Z = Ge, Si): Ab initio study. International Journal of Modern Physics B, 2018, 32, 1850324.	2.0	2
47	Electronic and optical properties of V doped AlN nanosheet: DFT calculations. Chinese Journal of Physics, 2018, 56, 2698-2709.	3.9	22
48	Novel Graphene-like Co₂VAl (111): Case Study on Magnetoelectronic and Optical Properties by First-Principles Calculations. Journal of Physical Chemistry C, 2017, 121, 3978-3986.	3.1	67
49	Study of Pressure Effects on the Elastic Stability and Optical Treatment of Co2VAl using GGA+U. Silicon, 2017, 9, 431-437.	3.3	0
50	Introduction of a carbon paste electrode based on nickel carbide for investigation of interaction between warfarin and vitamin K1. Journal of Pharmaceutical and Biomedical Analysis, 2017, 139, 156-164.	2.8	9
51	Topological nature in cubic phase of perovskite CsPbI 3 : By DFT. Solid State Communications, 2017, 259, 10-15.	1.9	38
52	Elastic stability and optical property under pressure of TiN phases: by first principles study. Indian Journal of Physics, 2017, 91, 1319-1330.	1.8	0
53	Effects of hydrogen and nitrogen impurities on electronic, structural and optical properties of 2D ZnS graphene based. Journal of Materials Science, 2017, 52, 10393-10405.	3.7	5
54	DFT study of elastic, half-metallic and optical properties of Co₂V(Al, Ge, Ga and Si) compounds. International Journal of Modern Physics B, 2017, 31, 1750109.	2.0	8

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55	Synthesis of multiwalled carbon nanotubes on Cu-Fe nano-catalyst substrate. Results in Physics, 2017, 7, 3640-3644.	4.1	19
56	Ab-initio study of mechanical, half-metallic and optical properties of Mn2ZrX (X = Ge, Si) compounds. Results in Physics, 2017, 7, 3522-3529.	4.1	42
57	Electronic and optical properties of GaN under pressure: DFT calculations. International Journal of Modern Physics B, 2017, 31, 1750261.	2.0	2
58	Electronic and optical properties of AlN under pressure: DFT calculations. International Journal of Modern Physics B, 2017, 31, 1650255.	2.0	0
59	Ab initio study of optical and vibrational properties of Ni₃C. International Journal of Modern Physics B, 2017, 31, 1750003.	2.0	3
60	Electronic and optical properties of cubic SrHfO3 at different pressures: A first principles study. Materials Chemistry and Physics, 2017, 186, 620-626.	4.0	43
61	Structural, Electronic and Optical Properties of InAs Phases: By GGA-PBG and GGA-EV Approximations. Journal of Chemical Research, 2017, 41, 172-182.	1.3	4
62	Carbon nanotubes growth on sub-surface catalyst layer of Cuâ€“Ni nanoparticles thin film. Protection of Metals and Physical Chemistry of Surfaces, 2016, 52, 1043-1045.	1.1	0
63	Microstructure and micromorphology of ZnO thin films: Case study on Al doping and annealing effects. Superlattices and Microstructures, 2016, 93, 109-121.	3.1	58
64	Thermal stability of amorphous tungsten/tungsten nitride synthesis using HFCVD as a diffusion barrier for copper. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	2.3	11
65	First-principles study of optical properties of InN nanosheet. International Journal of Modern Physics B, 2016, 30, 1650117.	2.0	29
66	Electronic, optical and elastic properties of cubic perovskite CsPbI3: Using first principles study. Optik, 2016, 127, 11433-11443.	2.9	96
67	The effects of deposition time on surface morphology, structural, electrical and optical properties of sputtered Ag-Cu thin films. European Physical Journal Plus, 2016, 131, 1.	2.6	22
68	Ab initio study of electronic, magnetic, elastic and optical properties of full Heusler Co2MnSb. Indian Journal of Physics, 2016, 90, 909-916.	1.8	31
69	Electronic and optical properties of 2D graphene-like ZnS: DFT calculations. Applied Surface Science, 2016, 369, 76-81.	6.1	103
70	Calculation of Half-Metal, Debye and Curie Temperatures of Co₂VAl Compound: First Principles Study*. Communications in Theoretical Physics, 2015, 63, 641-647.	2.5	42
71	Microstructure and optical properties of cobaltâ€“carbon nanocomposites prepared by RF-sputtering. Journal of Materials Science: Materials in Electronics, 2015, 26, 5964-5969.	2.2	27
72	Preparation and magnetoresistance behavior of nickel nanoparticles embedded in hydrogenated carbon film. Journal of Materials Science: Materials in Electronics, 2015, 26, 6814-6818.	2.2	30

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73	Topographic Characterization of Cuâ€“Ni NPs @ a-C:H Films by AFM and Multifractal Analysis. Journal of Physical Chemistry B, 2015, 119, 5662-5670.	2.6	61
74	A scheme for secure quantum communication network with authentication using GHZ-like states and cluster states controlled teleportation. Quantum Information Processing, 2015, 14, 4279-4295.	2.2	61
75	Thermodynamic phase diagram and electronic properties of Co₂VAlã€˜001ã€‰ film: A first-principles study. International Journal of Modern Physics B, 2014, 28, 1450145.	2.0	9
76	Electronic and optical properties of 2D graphene-like compounds titanium carbides and nitrides: DFT calculations. Solid State Communications, 2014, 195, 61-69.	1.9	177
77	Elastic and optical properties of zinc-blende CrSb and its effective mass. Rare Metals, 2014, 33, 615-621.	7.1	12
78	STUDY OF ELECTRICAL AND OPTICAL PROPERTIES OF Cu-ASSISTED AMORPHOUS CARBON THIN FILMS DEPOSITION BY DC MAGNETRON SPUTTERING. Modern Physics Letters B, 2013, 27, 1350174.	1.9	2
79	Characterization of microroughness parameters in Cu-C nanocomposite prepared by co-deposition of RF-sputtering and RF-PECVD. EPJ Applied Physics, 2013, 64, 11301.	0.7	32
80	Mechanical stability, half-metallic, and thermoelectric properties of LuCoTiSi, LuCoTiGe and LuCoTiSn: a DFT study. Indian Journal of Physics, 0, , 1.	1.8	2