

Qingyang Fan

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

64 papers	1,178 citations	21 h-index	30 g-index
70 ext. papers	1,507 ext. citations	3.7 avg, IF	5.29 L-index

#	Paper	IF	Citations
64	All sp ² hybridization BN polymorphs with wide bandgap. <i>Journal of Applied Physics</i> , 2022 , 131, 055703	2.5	3
63	SiTe alloys with direct band gaps for photoelectric application. <i>Vacuum</i> , 2022 , 199, 110952	3.7	2
62	Physical properties of group 14 elements in P2/m phase. <i>Journal of Solid State Chemistry</i> , 2022 , 305, 122641	3.4	8
61	Two novel large-cell boron nitride polymorphs. <i>Diamond and Related Materials</i> , 2022 , 126, 109046	3.5	0
60	3D superhard metallic carbon network with 1D multi-threaded conduction. <i>Diamond and Related Materials</i> , 2021 , 120, 108706	3.5	1
59	Two-Dimensional Tetrahex-GeC: A Material with Tunable Electronic and Optical Properties Combined with Ultrahigh Carrier Mobility. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 14489-14498	3.5	4
58	Structural, Electronic, and Optical Properties of Hexagonal XC (X=N, P, As, and Sb) Monolayers. <i>ChemPhysChem</i> , 2021 , 22, 1124-1133	3.2	0
57	Two orthorhombic superhard carbon allotropes: C16 and C24. <i>Diamond and Related Materials</i> , 2021 , 116, 108426	3.5	18
56	Group 14 semiconductor alloys in the P41212 phase: A comprehensive study. <i>Results in Physics</i> , 2021 , 25, 104254	3.7	9
55	Two-dimensional carbon allotropes with tunable direct band gaps and high carrier mobility. <i>Applied Surface Science</i> , 2021 , 537, 147885	6.7	20
54	Stability, mechanical, anisotropic and electronic properties of oP8 carbon: A superhard carbon allotrope in orthorhombic phase. <i>Journal of Solid State Chemistry</i> , 2021 , 294, 121894	3.3	24
53	Enhanced direct interspecies electron transfer with transition metal oxide accelerants in anaerobic digestion. <i>Bioresource Technology</i> , 2021 , 320, 124294	11	30
52	Three-dimensional metallic carbon allotropes with superhardness. <i>Nanotechnology Reviews</i> , 2021 , 10, 1266-1276	6.3	7
51	Direct and quasi-direct band gap of novel Si-Ge alloys in-31 phase. <i>Journal of Physics Condensed Matter</i> , 2021 , 33,	1.8	4
50	Semimetallic 2D Alkynyl Carbon Materials with Distorted Type I Dirac Cones. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 18022-18030	3.8	1
49	An orthorhombic superhard carbon allotrope: Pmma C24. <i>Journal of Solid State Chemistry</i> , 2021 , 300, 122260	3.3	16
48	Ima2 C32: An orthorhombic carbon allotrope with direct band gap. <i>Diamond and Related Materials</i> , 2021 , 120, 108602	3.5	1

47	Designing a sp ³ nanoporous structure of carbon: A comprehensive study on the physical properties. <i>Results in Physics</i> , 2020 , 19, 103473	3.7	12
46	Metallic and semiconducting carbon allotropes comprising of pentalene skeletons. <i>Diamond and Related Materials</i> , 2020 , 109, 108063	3.5	14
45	Physical Properties of XN (X = B, Al, Ga, In) in the - phase: First-Principles Calculations. <i>Materials</i> , 2020 , 13,	3.5	16
44	P63/mmc-Ge and their SiGe alloys with a mouldable direct band gap. <i>Semiconductor Science and Technology</i> , 2020 , 35, 055012	1.8	20
43	Physical properties of a novel microporous carbon material. <i>Diamond and Related Materials</i> , 2020 , 106, 107831	3.5	25
42	Penta-C: A Superhard Direct Band Gap Carbon Allotrope Composed of Carbon Pentagon. <i>Materials</i> , 2020 , 13,	3.5	25
41	Designing a sp ³ structure of carbon T-C9: First-principles calculations. <i>Results in Physics</i> , 2020 , 19, 103690	3.7	9
40	Effective mass anisotropy of Si-Ge alloys: a discussion of the effective mass tensor. <i>Physica Scripta</i> , 2020 , 95, 115808	2.6	3
39	PBCF-Graphene: A 2D Sp ² Hybridized Honeycomb Carbon Allotrope with a Direct Band Gap. <i>ChemNanoMat</i> , 2020 , 6, 139-147	3.5	40
38	Direct and quasi-direct band gap silicon allotropes with low energy and strong absorption in the visible for photovoltaic applications. <i>Results in Physics</i> , 2020 , 18, 103271	3.7	8
37	Superhard three-dimensional carbon with one-dimensional conducting channels. <i>New Journal of Chemistry</i> , 2020 , 44, 19789-19795	3.6	8
36	A novel two-dimensional sp-sp ² -sp ³ hybridized carbon nanostructure with a negative in-plane Poisson ratio and high electron mobility. <i>Computational Materials Science</i> , 2020 , 185, 109904	3.2	16
35	Novel III-V Nitride Polymorphs in the 4/ and Phases. <i>Materials</i> , 2020 , 13,	3.5	7
34	Six novel carbon and silicon allotropes with their potential application in photovoltaic field. <i>Journal of Physics Condensed Matter</i> , 2020 , 32, 355701	1.8	16
33	Five carbon allotropes from Squaroglitter structures. <i>Computational Materials Science</i> , 2020 , 178, 109634	3.2	39
32	SiGe alloys in C2/c phase with tunable direct band gaps: A comprehensive study. <i>Current Applied Physics</i> , 2019 , 19, 1325-1333	2.6	14
31	A hybrid niobium-based oxide with bio-based porous carbon as an efficient electrocatalyst in photovoltaics: a general strategy for understanding the catalytic mechanism. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14864-14875	1.3	51
30	Physical properties of Si-Ge alloys in C2/m phase: a comprehensive investigation. <i>Journal of Physics Condensed Matter</i> , 2019 , 31, 255703	1.8	13

29	Physical properties of group 14 semiconductor alloys in orthorhombic phase. <i>Journal of Applied Physics</i> , 2019 , 126, 045709	2.5	19
28	Two novel superhard carbon allotropes with honeycomb structures. <i>Journal of Applied Physics</i> , 2019 , 126, 145704	2.5	34
27	Electronic, Mechanical and Elastic Anisotropy Properties of X-Diamondyne (X = Si, Ge). <i>Materials</i> , 2019 , 12,	3.5	9
26	t-Si : A Novel Silicon Allotrope. <i>ChemPhysChem</i> , 2019 , 20, 128-133	3.2	42
25	Theoretical investigations of Ge _{1-x} Sn _x alloys (x = 0, 0.333, 0.667, 1) in P42/ncm phase. <i>Journal of Materials Science</i> , 2018 , 53, 9611-9626	4.3	23
24	Theoretical investigations of group IV alloys in the Lonsdaleite phase. <i>Journal of Materials Science</i> , 2018 , 53, 2785-2801	4.3	24
23	Structural, Mechanical, Anisotropic, and Thermal Properties of AlAs in C12 and P6 Phases under Pressure. <i>Materials</i> , 2018 , 11,	3.5	12
22	Structural, Electronic, and Thermodynamic Properties of Tetragonal t-SiGeN. <i>Materials</i> , 2018 , 11,	3.5	7
21	III-Nitride Polymorphs: XN (X=Al, Ga, In) in the Pnma Phase. <i>Chemistry - A European Journal</i> , 2018 , 24, 17280-17287	4.8	37
20	Thermodynamic, elastic, elastic anisotropy and minimum thermal conductivity of EGaN under high temperature. <i>Chinese Journal of Physics</i> , 2017 , 55, 400-411	3.5	11
19	Theoretical prediction of new C ₂ m-20 structure. <i>Chinese Physics B</i> , 2017 , 26, 046101	1.2	7
18	Two novel Ge phases and their Si-Ge alloys with excellent electronic and optical properties. <i>Materials and Design</i> , 2017 , 132, 539-551	8.1	21
17	A Novel Silicon Allotrope in the Monoclinic Phase. <i>Materials</i> , 2017 , 10,	3.5	12
16	Two novel silicon phases with direct band gaps. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 12905-13	3.6	40
15	Prediction of novel phase of silicon and Si-Ge alloys. <i>Journal of Solid State Chemistry</i> , 2016 , 233, 471-483	3.3	32
14	A New Phase of GaN. <i>Journal of Chemistry</i> , 2016 , 2016, 1-9	2.3	9
13	Si: A New Silicon Allotrope with Interesting Physical Properties. <i>Materials</i> , 2016 , 9,	3.5	22
12	The Mechanical and Electronic Properties of Carbon-Rich Silicon Carbide. <i>Materials</i> , 2016 , 9,	3.5	17

11	Two Novel CNiPhases: Structural, Mechanical and Electronic Properties. <i>Materials</i> , 2016 , 9,	3.5	26
10	Elastic anisotropy and electronic properties of Si ₃ N ₄ under pressures. <i>AIP Advances</i> , 2016 , 6, 085207	1.5	8
9	Mechanical and electronic properties of Si, Ge and their alloys in P42/mnm structure. <i>Materials Science in Semiconductor Processing</i> , 2016 , 43, 187-195	4.3	25
8	Mechanical and electronic properties of Si-Ge alloy in Cmmm structure. <i>Chinese Journal of Physics</i> , 2016 , 54, 298-307	3.5	9
7	Mechanical and electronic properties of C ₆₀ -Si alloys in the P2221 structure. <i>Chinese Journal of Physics</i> , 2016 , 54, 700-710	3.5	8
6	Elastic and electronic properties of Imm2- and I. <i>Computational Materials Science</i> , 2015 , 97, 6-13	3.2	21
5	Mechanical and electronic properties of Ca _{1-x} Mg _x O alloys. <i>Materials Science in Semiconductor Processing</i> , 2015 , 40, 676-684	4.3	15
4	Novel silicon allotropes: Stability, mechanical, and electronic properties. <i>Journal of Applied Physics</i> , 2015 , 118, 185704	2.5	38
3	Structural, mechanical, and electronic properties of P3m1-BCN. <i>Journal of Physics and Chemistry of Solids</i> , 2015 , 79, 89-96	3.9	62
2	Elastic and electronic properties of Pbca-BN: First-principles calculations. <i>Computational Materials Science</i> , 2014 , 85, 80-87	3.2	98
1	P213 BN: a novel large-cell boron nitride polymorph. <i>Communications in Theoretical Physics</i> ,	2.4	4