## **Alexander Chroneos**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3620670/publications.pdf

Version: 2024-02-01

328 papers 8,838 citations

26630 56 h-index 71685 **76** g-index

331 all docs

331 docs citations

times ranked

331

5546 citing authors

#	Article	IF	CITATIONS
1	Oxygen diffusion in solid oxide fuel cell cathode and electrolyte materials: mechanistic insights from atomistic simulations. Energy and Environmental Science, 2011, 4, 2774.	30.8	354
2	Anisotropic oxygen diffusion in tetragonal La $<$ sub $>2<$ sub $>$ NiO $<$ sub $>4+\hat{l}'<$ sub $>$ : molecular dynamics calculations. Journal of Materials Chemistry, 2010, 20, 266-270.	6.7	199
3	Diffusion of <i>n</i> -type dopants in germanium. Applied Physics Reviews, 2014, 1, 011301.	11.3	146
4	Oxygen ion diffusion in cation ordered/disordered GdBaCo <sub>2</sub> O <sub>5</sub> <sub>+</sub> $\hat{l}$ . Journal of Materials Chemistry, 2011, 21, 2183-2186.	6.7	139
5	Vacancy-mediated dopant diffusion activation enthalpies for germanium. Applied Physics Letters, 2008, 92, .	3.3	132
6	Oxygen transport in perovskite and related oxides: A brief review. Journal of Alloys and Compounds, 2010, 494, 190-195.	5.5	126
7	Elastic and thermodynamic properties of new (Zr3â^'Ti )AlC2 MAX-phase solid solutions. Computational Materials Science, 2017, 137, 318-326.	3.0	119
8	Effect of strain on the oxygen diffusion in yttria and gadolinia co-doped ceria. Solid State Ionics, 2013, 230, 37-42.	2.7	114
9	Impact of uniaxial strain and doping on oxygen diffusion in CeO2. Scientific Reports, 2014, 4, 6068.	3.3	106
10	Interstitialcy diffusion of oxygen in tetragonal La <sub>2</sub> CoO <sub>4</sub> <sub>+</sub> Î. Physical Chemistry Chemical Physics, 2011, 13, 2242-2249.	2.8	104
11	Synthesis and DFT investigation of new bismuth-containing MAX phases. Scientific Reports, 2016, 6, 18829.	3.3	97
12	Molecular dynamics study of oxygen diffusion in Pr2NiO4+δ. Physical Chemistry Chemical Physics, 2010, 12, 6834.	2.8	96
13	Anisotropic oxygen diffusion in PrBaCo2O5.5 double perovskites. Solid State Ionics, 2012, 216, 41-43.	2.7	92
14	Deviations from Vegard's law in ternary III-V alloys. Physical Review B, 2010, 82, .	3.2	89
15	S-functionalized MXenes as electrode materials for Li-ion batteries. Applied Materials Today, 2016, 5, 19-24.	4.3	89
16	Detecting anomalies in time series data via a deep learning algorithm combining wavelets, neural networks and Hilbert transform. Expert Systems With Applications, 2017, 85, 292-304.	7.6	86
17	Genetics of superionic conductivity in lithium lanthanum titanates. Physical Chemistry Chemical Physics, 2015, 17, 178-183.	2.8	85
18	Review of Recent Studies on Solution Combustion Synthesis of Nanostructured Catalysts. Advanced Engineering Materials, 2018, 20, 1800047.	3.5	85

#	Article	IF	CITATIONS
19	Diffusion and defect reactions between donors, C, and vacancies in Ge. II. Atomistic calculations of related complexes. Physical Review B, 2008, 77, .	3.2	81
20	Diffusion of $\langle i \rangle E \langle  i \rangle$ centers in germanium predicted using GGA+ $\langle i \rangle U \langle  i \rangle$ approach. Applied Physics Letters, 2011, 99, 072112.	3.3	77
21	Carbon, dopant, and vacancy interactions in germanium. Journal of Applied Physics, 2007, 102, 083707.	2.5	76
22	Vacancy-arsenic clusters in germanium. Applied Physics Letters, 2007, 91, .	3.3	75
23	Fluorine effect on As diffusion in Ge. Journal of Applied Physics, 2011, 109, .	2.5	73
24	Intrinsic and extrinsic diffusion of indium in germanium. Journal of Applied Physics, 2009, 106, .	2.5	72
25	A perspective on MXenes: Their synthesis, properties, and recent applications. Journal of Applied Physics, 2020, 128, .	2.5	72
26	Defect processes in orthorhombic LnBaCo2O5.5 double perovskites. Physical Chemistry Chemical Physics, 2011, 13, 15305.	2.8	71
27	Physical properties of the recently discovered Zr2(All $\hat{a}$ 'x Bi x )C MAX phases. Journal of Materials Science: Materials in Electronics, 2016, 27, 11925-11933.	2.2	71
28	Attempts to synthesise quaternary MAX phases (Zr,M) <sub>2</sub> AlC and Zr <sub>2</sub> (Al,A)C as a way to approach Zr <sub>2</sub> AlC. Materials Research Letters, 2016, 4, 137-144.	8.7	71
29	Modeling self-diffusion in UO2 and ThO2 by connecting point defect parameters with bulk properties. Solid State Ionics, 2015, 274, 1-3.	2.7	70
30	<i>c</i> -axis hopping conductivity in heavily Pr-doped YBCO single crystals. Superconductor Science and Technology, 2013, 26, 085017.	3.5	69
31	Oxygen diffusion in <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Sr</mml:mtext></mml:mrow><mml:mrow> A molecular dynamics study. Physical Review B, 2009, 79, .</mml:mrow></mml:msub></mml:mrow></mml:math>	< <b>312</b> ml:mn:	> <b>0&amp;</b> 75
32	Point defect engineering strategies to suppress A-center formation in silicon. Applied Physics Letters, 2011, 99, .	3.3	68
33	Oxygen defect processes in silicon and silicon germanium. Applied Physics Reviews, 2015, 2, .	11.3	68
34	Strain-induced changes to the electronic structure of germanium. Journal of Physics Condensed Matter, 2012, 24, 195802.	1.8	67
35	Defect interactions in Sn1â^'xGex random alloys. Applied Physics Letters, 2009, 94, 252104.	3.3	65
36	Electro-transport and structure of 1-2-3 HTSC single crystals with different plane defects topologies. Journal of Materials Science: Materials in Electronics, 2012, 23, 1255-1259.	2.2	65

#	Article	IF	CITATIONS
37	Intrinsic Defects and H Doping in WO3. Scientific Reports, 2017, 7, 40882.	3.3	65
38	E centers in ternary Silâ^'xâ^'yGexSny random alloys. Applied Physics Letters, 2009, 95, .	3.3	64
39	Nonlinear stability of mmi:math xmins:mmi="http://www.w3.org/1998/Math/Math/ML" display="inline"> <mml:mi>E</mml:mi> centers in <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:m< td=""><td>3.2 <mml:mn< td=""><td>63 &gt;1</td></mml:mn<></td></mml:m<></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:mrow></mml:math>	3.2 <mml:mn< td=""><td>63 &gt;1</td></mml:mn<>	63 >1
40	Fluctuation conductivity and pseudogap in single crystals under pressure with transport current flowing under an angle 45° to the twin boundaries. Physica C: Superconductivity and Its Applications, 2014, 501, 24-31.	1.2	63
41	Synthesis and physical properties of (Zr <sub>1â^*<i>x</i>&gt;/sub&gt;1â^*<i>x</i></sub> ,Ti <sub><i>x</i>&gt;/sub&gt;)<sub>3</sub>AlC<sub>2</sub><scp>MAX</scp>phases. Journal of the American Ceramic Society, 2017, 100, 3393-3401.</sub>	3.8	63
42	Defects, dopants and Mg diffusion in MgTiO3. Scientific Reports, 2019, 9, 4394.	3.3	63
43	Dopant-vacancy cluster formation in germanium. Journal of Applied Physics, 2010, 107, .	2.5	62
44	Fluorine codoping in germanium to suppress donor diffusion and deactivation. Journal of Applied Physics, 2009, 106, .	2.5	61
45	Phase separation in oxygen deficient ΗοBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-Î</sub> single crystals: effect of high pressure and twin boundaries. Philosophical Magazine, 2011, 91, 2291-2302.	1.6	61
46	Impact of isovalent doping on the trapping of vacancy and interstitial related defects in Si. Journal of Applied Physics, 2013, 113, 113506.	2.5	61
47	Nb-based MXenes for Li-ion battery applications. Physica Status Solidi - Rapid Research Letters, 2015, 9, 726-729.	2.4	61
48	Silicene/germanene on MgX $<$ sub $>$ 2 $<$ /sub $>$ (X = Cl, Br, and I) for Li-ion battery applications. Nanoscale, 2016, 8, 7272-7277.	5.6	61
49	Implantation and diffusion of phosphorous in germanium. Materials Science in Semiconductor Processing, 2006, 9, 640-643.	4.0	59
50	Effect of high pressure on the fluctuation conductivity and the charge transfer of YBa2Cu3O7â^'Î' single crystals. Journal of Alloys and Compounds, 2008, 453, 69-74.	5 <b>.</b> 5	59
51	Effect of germanium substrate loss and nitrogen on dopant diffusion in germanium. Journal of Applied Physics, 2009, 105, .	2.5	59
52	Interaction of A-centers with isovalent impurities in silicon. Journal of Applied Physics, 2010, 107, 093518.	2.5	59
53	The thermodynamics of hydride precipitation: The importance of entropy, enthalpy and disorder. Acta Materialia, 2014, 79, 351-362.	7.9	59
54	The Effect of Ion Size on Solution Mechanism and Defect Cluster Geometry. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1997, 101, 1204-1210.	0.9	58

#	Article	IF	Citations
55	The vacancy in silicon: A critical evaluation of experimental and theoretical results. Journal of Applied Physics, 2008, 104, 076108.	2.5	58
56	Effect of tin doping on oxygen- and carbon-related defects in Czochralski silicon. Journal of Applied Physics, 2011, 110, .	2.5	58
57	Effect of annealing on a pseudogap state in untwinned YBa2Cu3O7â~δ single crystals. Scientific Reports, 2019, 9, 9274.	3.3	57
58	Impact of germanium on vacancy clustering in germanium-doped silicon. Journal of Applied Physics, 2009, 105, .	2.5	56
59	Modeling oxygen self-diffusion in UO2 under pressure. Solid State Ionics, 2015, 282, 26-30.	2.7	55
60	Isovalent impurity-vacancy complexes in germanium. Physica Status Solidi (B): Basic Research, 2007, 244, 3206-3210.	1.5	54
61	Structural relaxation, metal-to-insulator transition and pseudo-gap in oxygen deficient ĐĐ¾Ba2Cu3O7â^δsingle crystals. Physica C: Superconductivity and Its Applications, 2009, 469, 203-206.	1.2	54
62	Effect of praseodymium on the electrical resistance of YВа2Đ¡u3Đž7â~Î′ single crystals. Solid State Communications, 2014, 190, 18-22.	1.9	54
63	Vacancies and defect levels in III–V semiconductors. Journal of Applied Physics, 2013, 114, .	2.5	53
64	Lithium Doping of ZnO for High Efficiency and Stability Fullerene and Non-fullerene Organic Solar Cells. ACS Applied Energy Materials, 2019, 2, 1663-1675.	5.1	52
65	Phosphorous clustering in germanium-rich silicon germanium. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 154-155, 72-75.	3.5	51
66	Physical properties and defect processes of M3SnC2 (MÂ= Ti, Zr, Hf) MAX phases: Effect of M-elements. Journal of Alloys and Compounds, 2018, 748, 804-813.	5.5	49
67	INFLUENCE OF HIGH PRESSURE ON THE TEMPERATURE-DEPENDENCE OF THE PSEUDO-GAP IN OXYGEN DEFICIENT <font>YBa</font> <sub>2</sub> <font>Cu</font> <sub>3</sub> <font>O</font> <sub>7-Î</sub> SINGLE CRYSTALS. Modern Physics Letters B, 2010, 24, 2295-2301.	1.9	48
68	Effect of long aging on the resistivity properties of optimally doped YBa2Cu3O7â^î^single crystals. Solid State Communications, 2013, 170, 6-9.	1.9	48
69	Transport anisotropy and pseudo-gap state in oxygen deficient ReBa2Cu3O7â~δ(Re=Y, Ho) single crystals. Journal of Alloys and Compounds, 2008, 464, 58-66.	5.5	47
70	Fluctuation conductivity of oxygen underdoped YBa2Cu3O7â^Î single crystals. Physica B: Condensed Matter, 2014, 436, 88-90.	2.7	47
71	Metal-to-insulator transition in Y1â^'xPrxBa2Cu3O7â^'Î' single crystals with various praseodymium contents. Physica C: Superconductivity and Its Applications, 2013, 485, 89-91.	1.2	46
72	INFLUENCE OF LONGITUDINAL MAGNETIC FIELD ON THE FLUCTUATION CONDUCTIVITY IN SLIGHTLY <font>Al</font> -DOPED <font>YBa</font> <sub>2</sub> <font>Cu</font> <sub>3-z</sub> <font>Al</font> <sub>z</sub> <font>O</font> In SINGLE CRYSTALS WITH A GIVEN TOPOLOGY OF PLANE DEFECTS. Modern Physics Letters B, 2011, 25, 2131-2136.	t> <suub>7-ĺ</suub>	~(sub>

#	Article	IF	CITATIONS
73	Relaxation of the normal electrical resistivity induced by high-pressure in strongly underdoped YBa2Cu3O7–δ single crystals. Physica B: Condensed Matter, 2012, 407, 4470-4472.	2.7	45
74	Nuclear wasteform materials: Atomistic simulation case studies. Journal of Nuclear Materials, 2013, 441, 29-39.	2.7	45
75	Experimental synthesis and density functional theory investigation of radiation tolerance of Zr <sub>3</sub> (Al <sub>1â€</sub> <scp><sub>x</sub>S</scp> i <sub>x</sub> )C <sub>2</sub> <scp>MAX</scp> phases. Journal of the American Ceramic Society, 2017, 100, 1377-1387.	3.8	45
76	Excess conductivity and pseudo-gap state in YBCO single crystals slightly doped with Al and Pr. Journal of Materials Science: Materials in Electronics, 2007, 18, 811-815.	2.2	44
77	Defect process and lithium diffusion in Li2TiO3. Solid State Ionics, 2018, 327, 93-98.	2.7	43
78	Evolution of the Fishtail-Effect in Pure and Ag-doped MG-YBCO. Journal of Low Temperature Physics, 2010, 161, 387-394.	1.4	42
79	Effect of small oxygen deficiency on the para-coherent transition and 2D–3D crossover in untwinned YBa2Đ¡uĐ·Đž7â~δ single crystals. Journal of Alloys and Compounds, 2011, 509, 4553-4556.	<b>5.</b> 5	41
80	A-centers in silicon studied with hybrid density functional theory. Applied Physics Letters, 2013, 103, 052101.	3.3	40
81	Effect of high pressure on the electrical resistivity of optimally doped YBa2Cu3O7â° single crystals with unidirectional planar defects. Physica B: Condensed Matter, 2013, 422, 33-35.	2.7	40
82	Effect of high pressure on the metal-dielectric transition and the pseudo-gap temperature range in oxygen deficient YBa2Cu3O7â^δsingle crystals. Journal of Materials Science: Materials in Electronics, 2011, 22, 20-24.	2.2	39
83	Peculiarities of pseudogap in Y0.95Pr0.05Ba2Cu3O7â^Î single crystals under pressure up to 1.7 GPa. Scientific Reports, 2019, 9, 20424.	3.3	39
84	Resistive investigation of pseudogap state in non-stoichiometric ReBa2Cu3O7â^î^(Re=Y, Ho) single crystals with account for BCS–BEC crossover. Journal of Alloys and Compounds, 2009, 485, L21-L23.	<b>5.</b> 5	38
85	Carbon related defects in irradiated silicon revisited. Scientific Reports, 2014, 4, 4909.	3.3	38
86	A high-entropy manganite in an ordered nanocomposite for long-term application in solid oxide cells. Nature Communications, 2021, 12, 2660.	12.8	37
87	Lithium diffusion in Li5FeO4. Scientific Reports, 2018, 8, 5832.	3.3	36
88	Defect chemistry of doped bixbyite oxides. Solid State Sciences, 2007, 9, 588-593.	3.2	35
89	Defect processes in F and Cl doped anatase TiO2. Scientific Reports, 2019, 9, 19970.	3.3	35
90	Atomic scale simulations of arsenic–vacancy complexes in germanium and silicon. Materials Science in Semiconductor Processing, 2006, 9, 536-540.	4.0	34

#	Article	IF	Citations
91	Li2SnO3 as a Cathode Material for Lithium-ion Batteries: Defects, Lithium Ion Diffusion and Dopants. Scientific Reports, 2018, 8, 12621.	3.3	34
92	Chemically stable new MAX phase V <sub>2</sub> SnC: a damage and radiation tolerant TBC material. RSC Advances, 2020, 10, 43783-43798.	3.6	34
93	Robust Inorganic Hole Transport Materials for Organic and Perovskite Solar Cells: Insights into Materials Electronic Properties and Device Performance. Solar Rrl, 2021, 5, 2000555.	5.8	34
94	Defects, Dopants and Sodium Mobility in Na2MnSiO4. Scientific Reports, 2018, 8, 14669.	3.3	33
95	Defects and dopant properties of Li3V2(PO4)3. Scientific Reports, 2019, 9, 333.	3.3	33
96	Intrinsic defect processes and elastic properties of Ti3AC2 (A = Al, Si, Ga, Ge, In, Sn) MAX phases. Journal of Applied Physics, 2018, 123, .	2.5	31
97	A thermodynamic approach of self- and hetero-diffusion in GaAs: connecting point defect parameters with bulk properties. RSC Advances, 2016, 6, 53324-53330.	3.6	30
98	Defects and lithium migration in Li2CuO2. Scientific Reports, 2018, 8, 6754.	3.3	30
99	Learning Driver Braking Behavior Using Smartphones, Neural Networks and the Sliding Correlation Coefficient: Road Anomaly Case Study. IEEE Transactions on Intelligent Transportation Systems, 2019, 20, 65-74.	8.0	30
100	Preparation of hydrogen, fluorine and chlorine doped and co-doped titanium dioxide photocatalysts: a theoretical and experimental approach. Scientific Reports, 2021, 11, 5700.	3.3	30
101	Engineering the free vacancy and active donor concentrations in phosphorus and arsenic double donor-doped germanium. Journal of Applied Physics, 2008, 104, .	2.5	29
102	Impurity diffusion, point defect engineering, and surface/interface passivation in germanium. Annalen Der Physik, 2012, 524, 123-132.	2.4	29
103	Solution combustion synthesis of nano-catalysts with a hierarchical structure. Journal of Catalysis, 2018, 364, 112-124.	6.2	29
104	Engineering Transport in Manganites by Tuning Local Nonstoichiometry in Grain Boundaries. Advanced Materials, 2019, 31, e1805360.	21.0	29
105	Diffusion of tin in germanium: A GGA+ <i>U</i> approach. Applied Physics Letters, 2011, 99, .	3.3	28
106	Point defect engineering strategies to retard phosphorous diffusion in germanium. Physical Chemistry Chemical Physics, 2013, 15, 367-371.	2.8	28
107	Defect Chemistry and Li-ion Diffusion in Li2RuO3. Scientific Reports, 2019, 9, 550.	3.3	28
108	Defects, dopants and Li-ion diffusion in Li2SiO3. Solid State Ionics, 2019, 335, 61-66.	2.7	28

#	Article	IF	CITATIONS
109	Defects, Lithium Mobility and Tetravalent Dopants in the Li3NbO4 Cathode Material. Scientific Reports, 2019, 9, 2192.	3.3	28
110	Connecting point defect parameters with bulk properties to describe diffusion in solids. Applied Physics Reviews, 2016, 3, .	11.3	27
111	Structural and optical properties of the recently synthesized (Zr3â^'x Ti x )AlC2 MAX phases. Journal of Materials Science: Materials in Electronics, 2017, 28, 3386-3393.	2.2	27
112	A roadmap of strain in doped anatase TiO2. Scientific Reports, 2018, 8, 12790.	3.3	27
113	Effects of Al substitution by Si in Ti3AlC2 nanolaminate. Scientific Reports, 2021, 11, 3410.  Phase stability and the arsenic vacancy defect in In <mml:math< td=""><td>3.3</td><td>27</td></mml:math<>	3.3	27
114	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:msub><mml:mrow /&gt;<mml:mi>x</mml:mi></mml:mrow </mml:msub> Ga <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"&gt;<mml:msub><mml:mrow /&gt;<mml:mrow><mml:mn>1</mml:mn><mml:mo>â^'</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:mrow </mml:msub></mml:math 	3.2 <th>26 nth&gt;As.</th>	26 nth>As.
115	Physical Review B, 2011, 84, . Composition and temperature dependence of self-diffusion in Si1â^'x Ge x alloys. Scientific Reports, 2017, 7, 1374.	3.3	26
116	Insights into the physical properties of a new 211 MAX phase Nb2CuC. Journal of Physics and Chemistry of Solids, 2021, 149, 109759.	4.0	26
117	Concentration of intrinsic defects and self-diffusion in GaSb. Journal of Applied Physics, 2008, 104, 093714.	2.5	25
118	A-centers and isovalent impurities in germanium: Density functional theory calculations. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2011, 176, 453-457.	3.5	25
119	New atomic scale simulation models for hydroxides and oxyhydroxides. Journal of Materials Science, 2006, 41, 675-687.	3.7	24
120	Structure of $Sn1\hat{a}^{-1}xGex$ random alloys as obtained from the coherent potential approximation. Journal of Applied Physics, 2011, 110, 036105.	2.5	24
121	Modelling zirconium hydrides using the special quasirandom structure approach. Physical Chemistry Chemical Physics, 2013, 15, 7599.	2.8	24
122	Hydrogen and nitrogen codoping of anatase TiO2 for efficiency enhancement in organic solar cells. Scientific Reports, 2017, 7, 17839.	3.3	24
123	Defects, Dopants and Lithium Mobility in Li 9 V 3 (P 2 O 7 ) 3 (PO 4 ) 2. Scientific Reports, 2018, 8, 8140.	3.3	23
124	Formation and evolution of oxygen-vacancy clusters in lead and tin doped silicon. Journal of Applied Physics, 2012, 111, .	2.5	22
125	Vacancy-oxygen defects in silicon: the impact of isovalent doping. Journal of Materials Science: Materials in Electronics, 2014, 25, 2395-2410.	2.2	22
126	Diffusion in energy materials: Governing dynamics from atomistic modelling. Applied Physics Reviews, 2017, 4, .	11.3	22

#	Article	IF	Citations
127	Defect Chemistry and Na-Ion Diffusion in Na3Fe2(PO4)3 Cathode Material. Materials, 2019, 12, 1348.	2.9	22
128	Li3SbO4 lithium-ion battery material: Defects, lithium ion diffusion and tetravalent dopants. Materials Chemistry and Physics, 2019, 225, 34-41.	4.0	22
129	Atomic scale simulations of donor–vacancy pairs in germanium. Journal of Materials Science: Materials in Electronics, 2007, 18, 763-768.	2.2	20
130	Effect of carbon on dopant–vacancy pair stability in germanium. Semiconductor Science and Technology, 2011, 26, 095017.	2.0	20
131	Impact of doping on the ionic conductivity of ceria: A comprehensive model. Journal of Chemical Physics, 2013, 138, 224705.	3.0	20
132	Influence of planar and point defects on the basal-plane conductivity of HoBaCuO single crystals. Physica C: Superconductivity and Its Applications, 2015, 516, 58-61.	1.2	20
133	Modelling solid solutions with cluster expansion, special quasirandom structures, and thermodynamic approaches. Applied Physics Reviews, 2017, 4, 041301.	11.3	20
134	Na3V(PO4)2 cathode material for Na ion batteries: Defects, dopants and Na diffusion. Solid State lonics, 2019, 336, 75-79.	2.7	20
135	312 MAX Phases: Elastic Properties and Lithiation. Materials, 2019, 12, 4098.	2.9	20
136	A thermodynamic approach to self-diffusion in silicon: Evidence of a single diffusion mechanism?. Materials Chemistry and Physics, 2016, 181, 204-208.	4.0	19
137	Self-diffusion in garnet-type Li7La3Zr2O12 solid electrolytes. Scientific Reports, 2021, 11, 451.	3.3	19
138	Unexpected relationship between interlayer distances and surface/cleavage energies in $\hat{l}^3 < i > - < /i > TiAl:$ density functional study. Journal of Physics Condensed Matter, 2011, 23, 265009.	1.8	18
139	Influence of atomic structure on the nano-nickel-based catalyst activity produced by solution combustion synthesis in the hydrogenation of maleic acid. Journal of Catalysis, 2017, 348, 9-21.	6.2	18
140	Special quasirandom structures for gadolinia-doped ceria and related materials. Physical Chemistry Chemical Physics, 2012, 14, 11737.	2.8	17
141	Fluctuation conductivity and possible pseudogap state in FeAs-based superconductor EuFeAsO0.85F0.15. Materials Research Express, 2016, 3, 076001.	1.6	17
142	Optimized hydrogen positions for aluminium and iron containing hydroxide minerals. Journal of Materials Science, 2007, 42, 2024-2029.	3.7	16
143	Extrinsic doping in silicon revisited. Applied Physics Letters, 2010, 96, 242107.	3.3	16
144	Doping strategies to control A-centres in silicon: insights from hybrid density functional theory. Physical Chemistry Chemical Physics, 2014, 16, 8487.	2.8	16

#	Article	IF	Citations
145	Anomaly detection in time series data using a combination of wavelets, neural networks and Hilbert transform. , $2015,  ,  .$		16
146	Describing oxygen self-diffusion in PuO2 by connecting point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 3287-3290.	2.2	16
147	Modification of superconducting and resistive properties ofÂHoBa2Cu3O7â^î^î single crystals under application-removal of high hydrostatic pressure. Modern Physics Letters B, 2016, 30, 1650188.	1.9	16
148	Different diffusion mechanisms of oxygen in ReBa 2 Cu 3 O $7\hat{a}^{\circ}$ x (Re = Y, Ho) single crystals. Physica C: Superconductivity and Its Applications, 2017, 536, 26-29.	1.2	16
149	Diffusion and Dopant Activation in Germanium: Insights from Recent Experimental and Theoretical Results. Applied Sciences (Switzerland), 2019, 9, 2454.	2.5	16
150	Impact of boron and indium doping on the structural, electronic and optical properties of SnO2. Scientific Reports, 2021, 11, 13031.	3.3	16
151	Special quasirandom structures for binary/ternary group IV random alloys. Chemical Physics Letters, 2010, 493, 97-102.	2.6	15
152	Carbon, oxygen and intrinsic defect interactions in germanium-doped silicon. Semiconductor Science and Technology, 2011, 26, 105024.	2.0	15
153	Doping and cluster formation in diamond. Journal of Applied Physics, 2011, 110, .	2.5	15
154	Defect engineering of the oxygen-vacancy clusters formation in electron irradiated silicon by isovalent doping: An infrared perspective. Journal of Applied Physics, 2012, 112, .	2.5	15
155	Defect configurations of high-k cations in germanium. Journal of Applied Physics, 2012, 111, 023714.	2.5	15
156	Co-doping with antimony to control phosphorous diffusion in germanium. Journal of Applied Physics, 2013, 113, .	2.5	15
157	G-centers in irradiated silicon revisited: A screened hybrid density functional theory approach. Journal of Applied Physics, 2014, 115, .	2.5	15
158	Connecting bulk properties of germanium with the behavior of self- and dopant diffusion. Materials Science in Semiconductor Processing, 2015, 36, 179-183.	4.0	15
159	Toward Defect Engineering Strategies to Optimize Energy and Electronic Materials. Applied Sciences (Switzerland), 2017, 7, 674.	2.5	15
160	<i>Ab initio</i> modeling of MAX phase solid solutions using the special quasirandom structure approach. Physical Chemistry Chemical Physics, 2018, 20, 1173-1180.	2.8	15
161	Defect, Diffusion and Dopant Properties of NaNiO2: Atomistic Simulation Study. Energies, 2019, 12, 3094.	3.1	15
162	Vacancy–indium clusters in implanted germanium. Chemical Physics Letters, 2010, 490, 38-40.	2.6	14

#	Article	IF	CITATIONS
163	Ultrafast palladium diffusion in germanium. Journal of Materials Chemistry A, 2015, 3, 3832-3838.	10.3	14
164	Modeling indium diffusion in germanium by connecting point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 2113-2116.	2.2	14
165	Thermodynamic calculations of oxygen self-diffusion in mixed-oxide nuclear fuels. RSC Advances, 2016, 6, 74018-74027.	3.6	14
166	The encapsulation selectivity for anionic fission products imparted by an electride. Scientific Reports, 2019, 9, 13612.	3.3	14
167	Behavior of Li-ion on the surface of Ti3C2–T (T = O, S, Se, F, Cl, Br) MXene: Diffusion barrier and conductive pathways. Journal of Applied Physics, 2021, 130, .	2.5	14
168	LOCALIZATION EFFECT AND PSEUDOGAP IN PRASEODYMIUM DOPED <font>Y</font> <sub>1-z</sub> <font>Pr</font> <sub>z</sub> <font>Ba</font> <sub>2</sub> <font>Cu</font> SINGLE CRYSTALS. Modern Physics Letters B, 2012, 26, 1250163.	<su<b>b93<td>ub<b>1</b>3font&gt;O&lt;</td></su<b>	ub <b>1</b> 3font>O<
169	Electronegativity and doping in Si1-xGex alloys. Scientific Reports, 2020, 10, 7459.	3.3	13
170	Optical response, lithiation and charge transfer in Sn-based 211 MAX phases with electron localization function. Journal of Materials Research and Technology, 2022, 18, 2470-2479.	5.8	13
171	Defect engineering strategies for germanium. Journal of Materials Science: Materials in Electronics, 2013, 24, 1741-1747.	2.2	12
172	Antisites in III-V semiconductors: Density functional theory calculations. Journal of Applied Physics, 2014, $116$ , .	2.5	12
173	Stress-enhanced lithiation in MAX compounds for battery applications. Applied Materials Today, 2017, 9, 192-195.	4.3	12
174	Defects, Diffusion, and Dopants in Li2Ti6O13: Atomistic Simulation Study. Materials, 2019, 12, 2851.	2.9	12
175	Defect Process, Dopant Behaviour and Li Ion Mobility in the Li2MnO3 Cathode Material. Energies, 2019, 12, 1329.	3.1	12
176	Ru-Doped Single Walled Carbon Nanotubes as Sensors for SO2 and H2S Detection. Chemosensors, 2021, 9, 120.	3.6	12
177	Interaction of oxygen vacancies in yttrium germanates. Physical Chemistry Chemical Physics, 2012, 14, 14630.	2.8	11
178	Impact of isovalent defect engineering strategies on carbon-related clusters in silicon. Journal of Materials Science: Materials in Electronics, 2013, 24, 1696-1701.	2.2	11
179	Phosphorous–vacancy–oxygen defects in silicon. Journal of Materials Chemistry A, 2013, 1, 11384.	10.3	11
180	Antisites and anisotropic diffusion in GaAs and GaSb. Applied Physics Letters, 2013, 103, 142107.	3.3	11

#	Article	IF	Citations
181	Impact of isovalent doping on radiation defects in silicon. Journal of Applied Physics, 2013, 114, .	2.5	11
182	Production and evolution of A-centers in n-type Silâ°'xGex. Journal of Applied Physics, 2013, 113, 113507.	2.5	11
183	Charge and heat transfer of the Ti3AlC2 MAX phase. Journal of Materials Science: Materials in Electronics, 2018, 29, 11478-11481.	2.2	11
184	Defect Chemistry, Sodium Diffusion and Doping Behaviour in NaFeO2 Polymorphs as Cathode Materials for Na-Ion Batteries: A Computational Study. Materials, 2019, 12, 3243.	2.9	11
185	Technetium Encapsulation by A Nanoporous Complex Oxide 12CaO•7Al2O3 (C12A7). Nanomaterials, 2019, 9, 816.	4.1	11
186	Defects and Dopants in CaFeSi2O6: Classical and DFT Simulations. Energies, 2020, 13, 1285.	3.1	11
187	Interaction of <i>n</i> -type dopants with oxygen in silicon and germanium. Journal of Applied Physics, 2012, 112, .	2.5	10
188	Effect of trivalent dopants on local coordination and electronic structure in crystalline and amorphous ZnO. Thin Solid Films, 2014, 555, 117-121.	1.8	10
189	Copper diffusion in germanium: connecting point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 2693-2696.	2.2	10
190	Effect of electron irradiation on the fluctuation conductivity in YBa2Cu3O7â^î^î single crystals. Journal of Materials Science: Materials in Electronics, 2018, 29, 7725-7729.	2.2	10
191	Probabilistic kernel machines for predictive monitoring of weld residual stress in energy systems. Engineering Applications of Artificial Intelligence, 2018, 71, 138-154.	8.1	10
192	Mg diffusion in Si on a thermodynamic basis. Journal of Materials Science: Materials in Electronics, 2018, 29, 12022-12027.	2.2	10
193	Mg6MnO8 as a Magnesium-lon Battery Material: Defects, Dopants and Mg-lon Transport. Energies, 2019, 12, 3213.	3.1	10
194	Effects of Precursor Concentration in Solvent and Nanomaterials Room Temperature Aging on the Growth Morphology and Surface Characteristics of Ni–NiO Nanocatalysts Produced by Dendrites Combustion during SCS. Applied Sciences (Switzerland), 2019, 9, 4925.	2.5	10
195	Elastic behaviour and radiation tolerance in Nb-based 211 MAX phases. Materials Today Communications, 2020, 25, 101499.	1.9	10
196	Computer modeling investigation of MgV2O4 for Mg-ion batteries. Journal of Applied Physics, 2020, 127, 035106.	2.5	10
197	Intrinsic defect processes in bixbyite sesquioxides. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1213-1216.	0.8	9
198	Mechanisms of nonstoichiometry in HfN1â^'x. Journal of Applied Physics, 2009, 106, 083502.	2.5	9

#	Article	IF	CITATIONS
199	Interaction of metal impurities with native oxygen defects in GeO2. Microelectronic Engineering, 2013, 104, 37-41.	2.4	9
200	Investigation of oxygen self-diffusion in PuO <sub>2</sub> by combining molecular dynamics with thermodynamic calculations. RSC Advances, 2016, 6, 103641-103649.	3.6	9
201	Defect processes of M3AlC2 (M = V, Zr, Ta, Ti) MAX phases. Solid State Communications, 2017, 261, 54-56.	1.9	9
202	Impact of isovalent doping on the formation of the C i O i (Si I ) n defects in silicon. Solid State Communications, 2017, 263, 19-22.	1.9	9
203	Migration of sodium and lithium interstitials in anatase TiO2. Solid State Ionics, 2018, 315, 40-43.	2.7	9
204	Defect pair formation in fluorine and nitrogen codoped TiO2. Journal of Applied Physics, 2018, 123, 161510.	2.5	9
205	Electronic properties of the Sn1â^'xPbxO alloy and band alignment of the SnO/PbO system: a DFT study. Scientific Reports, 2020, 10, 16828.	3.3	9
206	Defect Processes in Halogen Doped SnO2. Applied Sciences (Switzerland), 2021, 11, 551.	2.5	9
207	W and VO2 defects in silicon studied with hybrid density functional theory. Journal of Materials Science: Materials in Electronics, 2015, 26, 1568-1571.	2.2	8
208	Palladium diffusion in germanium. Journal of Materials Science: Materials in Electronics, 2015, 26, 3787-3789.	2.2	8
209	Oxygen diffusion in germanium: interconnecting point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 7378-7380.	2.2	8
210	Infrared studies of the evolution of the CiOi(SiI) defect in irradiated Si upon isothermal anneals. Journal of Applied Physics, 2016, 119, 125704.	2.5	8
211	The CiOi(SiI)2 defect in silicon: density functional theory calculations. Journal of Materials Science: Materials in Electronics, 2017, 28, 10295-10297.	2.2	8
212	Thermodynamic modelling of fast dopant diffusion in Si. Journal of Applied Physics, 2018, 123, .	2.5	8
213	Influence of Preheating Temperature on Solution Combustion Synthesis of Ni–NiO Nanocomposites: Mathematical Model and Experiment. International Journal of Self-Propagating High-Temperature Synthesis, 2018, 27, 207-215.	0.5	8
214	Atomistic Simulations of the Defect Chemistry and Self-Diffusion of Li-ion in LiAlO2. Energies, 2019, 12, 2895.	3.1	8
215	Encapsulation of cadmium telluride nanocrystals within single walled carbon nanotubes. Inorganica Chimica Acta, 2019, 488, 246-254.	2.4	8
216	Excess Conductivity of Y <sub>0.05</sub> Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> Single Crystals. Acta Physica Polonica A, 2007, 111, 129-133.	0.5	8

#	Article	IF	CITATIONS
217	Stability of impurity–vacancy pairs in germanium carbide. Journal of Materials Science: Materials in Electronics, 2008, 19, 25-28.	2.2	7
218	Impact of oxygen on the diffusion of silicon in germanium: density functional theory calculations. Semiconductor Science and Technology, 2010, 25, 045002.	2.0	7
219	Dopant-defect interactions in Ge: Density functional theory calculations. Materials Science in Semiconductor Processing, 2012, 15, 691-696.	4.0	7
220	Effect of Praseodymium Concentration on the Excess Conductivity Near the Critical Temperature of Y1â°z Pr z Ba2Cu3O7â°Î´Single Crystals. Journal of Low Temperature Physics, 2013, 170, 216-222.	1.4	7
221	Germanium diffusion in aluminium: connection between point defect parameters with bulk properties. Journal of Materials Science: Materials in Electronics, 2015, 26, 8421-8424.	2.2	7
222	Defect processes in Li2ZrO3: insights from atomistic modelling. Journal of Materials Science: Materials in Electronics, 2017, 28, 11789-11793.	2.2	7
223	In situ trap properties in CCDs: the donor level of the silicon divacancy. Journal of Instrumentation, 2017, 12, P01025-P01025.	1.2	7
224	Encapsulation of heavy metals by a nanoporous complex oxide 12CaO · 7Al2O3. Journal of Applied Physics, 2019, 125, .	2.5	7
225	Cadmium trapping by C60 and B-, Si-, and N-doped C60. Journal of Applied Physics, 2019, 125, 054302.	2.5	7
226	Structural, defect, transport and dopant properties of AgNbO 3. ChemNanoMat, 2020, 6, 1337-1345.	2.8	7
227	Mg-ion diffusion on the surface of Ti3C2S2 MXene. Journal of Physics and Chemistry of Solids, 2022, 166, 110713.	4.0	7
228	lon incorporation on the Zr2CS2 MXene monolayer towards better-performing rechargeable ion batteries. Journal of Alloys and Compounds, 2022, 922, 166240.	5.5	7
229	OPTIMIZING OXYGEN DIFFUSION IN CATHODE MATERIALS FOR SOLID OXIDE FUEL CELLS. Modern Physics Letters B, 2012, 26, 1250196.	1.9	6
230	Impact of the germanium concentration in the stability of E-centers and A-centers in Silâ^'xGex. Journal of Materials Science: Materials in Electronics, 2013, 24, 2772-2776.	2.2	6
231	METALâE"INSULATOR TRANSITION AND THE TEMPERATURE OF THE PSEUDOGAP ANOMALY OPENING IN PRASEODYMIUM DOPED <font>Y</font> <sub>1-z</sub> <font>Cu</font> < SINGLE CRYSTALS, Modern Physics Letters B. 2013, 27, 1350029.	sub\$3 <td>ub<sup>6</sup><font>0</font></td>	ub <sup>6</sup> <font>0</font>
232	Infrared study of defects in nitrogen-doped electron irradiated silicon. Journal of Materials Science: Materials in Electronics, 2016, 27, 2054-2061.	2.2	6
233	Parametric Optimisation of Solution Combustion Synthesis Catalysts and Their Application for the Aqueous Hydrogenation of Maleic Acid. Catalysis Letters, 2018, 148, 764-778.	2.6	6
234	The CiCs(Sil)n Defect in Silicon from a Density Functional Theory Perspective. Materials, 2018, 11, 612.	2.9	6

#	Article	IF	CITATIONS
235	Defect, transport, and dopant properties of andradite garnet Ca3Fe2Si3O12. AIP Advances, 2020, 10, .	1.3	6
236	Defect Properties and Lithium Incorporation in Li2ZrO3. Energies, 2021, 14, 3963.	3.1	6
237	Oxygen self-diffusion in apatites. Monatshefte F $ ilde{A}^{1}\!/\!4$ r Chemie, 2012, 143, 345-353.	1.8	5
238	Infrared signals correlated with self-interstitial clusters in neutron-irradiated silicon. Journal of Materials Science: Materials in Electronics, 2013, 24, 4328-4331.	2.2	5
239	A critical assessment of interatomic potentials for ceria with application to its elastic properties revisited. Journal of Materials Science: Materials in Electronics, 2013, 24, 4590-4592.	2.2	5
240	Di-interstitial defect in silicon revisited. Journal of Applied Physics, 2013, 114, .	2.5	5
241	Tin diffusion in germanium: a thermodynamic approach. Journal of Materials Science: Materials in Electronics, 2017, 28, 9936-9940.	2.2	5
242	Diffusion coalescence in $\theta\theta^3$ 4Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7<math>\hat{a}^2</math><i>&gt;x</i></sub> single crystals under the application of hydrostatic pressure. Materials Research Express, 2017, 4, 096001.	1.6	5
243	Theoretical Modeling of Defects, Dopants, and Diffusion in the Mineral Ilmenite. Minerals (Basel,) Tj ETQq $1\ 1\ 0.78$	43.14 rgBT	   Overlock
244	A Computational Study of Defects, Li-Ion Migration and Dopants in Li2ZnSiO4 Polymorphs. Crystals, 2019, 9, 563.	2.2	5
245	Hydrogen Adsorption on Ru-Encapsulated, -Doped and -Supported Surfaces of C60. Surfaces, 2020, 3, 408-422.	2.3	5
246	Defects, diffusion, dopants and encapsulation of Na in NaZr2(PO4)3. Materialia, 2021, 16, 101039.	2.7	5
247	Defect and dopant properties in CaMnO3. AIP Advances, 2021, 11, 055106.	1.3	5
248	Vapor–liquid–solid growth and properties of one dimensional PbO and PbO/SnO <sub>2</sub> nanowires. Materials Advances, 2022, 3, 1695-1702.	5.4	5
249	Defect volumes of BO2 doped Y2O3 (B=Ti, Zr, Hf and Ce). Nuclear Instruments & Methods in Physics Research B, 2010, 268, 3111-3113.	1.4	4
250	Electronegativity and doping in semiconductors. Journal of Applied Physics, 2012, 112, .	2.5	4
251	Relaxation effect of pressure on the pseudogap in oxygen underdoped HoBa2Cu3O7â^î^single crystals. Journal of Materials Science: Materials in Electronics, 2013, 24, 5127-5131.	2.2	4
252	Localised vibrational mode spectroscopy studies of self-interstitial clusters in neutron irradiated silicon. Journal of Applied Physics, 2013, 114, 043502.	2.5	4

#	Article	IF	CITATIONS
253	Oxygen-vacancy defects in electron-irradiated Si: the role of carbon in their behavior. Journal of Materials Science: Materials in Electronics, 2014, 25, 914-921.	2.2	4
254	Transverse resistance of YBa2Cu3O7â~δsingle crystals. Current Applied Physics, 2015, 15, 617-621.	2.4	4
255	Activation volumes of oxygen self-diffusion in fluorite structured oxides. Materials Research Express, 2016, 3, 105504.	1.6	4
256	Controlling A-center concentration in silicon through isovalent doping: mass action analysis. Journal of Materials Science: Materials in Electronics, 2016, 27, 4385-4391.	2.2	4
257	Impact of local composition on the energetics of E-centres in Si1â^'xGex alloys. Scientific Reports, 2019, 9, 10849.	3.3	4
258	Stability of Coinage Metals Interacting with C60. Nanomaterials, 2019, 9, 1484.	4.1	4
259	Self-Diffusion in Perovskite and Perovskite Related Oxides: Insights from Modelling. Applied Sciences (Switzerland), 2020, 10, 2286.	2.5	4
260	Lithium Storage in Nanoporous Complex Oxide 12CaO•7Al2O3 (C12A7). Energies, 2020, 13, 1547.	3.1	4
261	Structural, Electronic, and Optical Properties of Group 6 Doped Anatase TiO2: A Theoretical Approach. Applied Sciences (Switzerland), 2021, 11, 1657. Li-diffusion pathways in <mml:math <="" td="" xmlns:mml="http://www.w3.org/1998/Math/MathML"><td>2.5</td><td>4</td></mml:math>	2.5	4
262	display="inline" id="d1e82" altimg="si1.svg"> <mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">Zr</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub>CO</mml:mrow> <mml:mrow><mml:mn>2</mml:mn></mml:mrow> CO <mml:mrow><mml:mn>2</mml:mn></mml:mrow> Image: mathvariant="normal">Image: math	o> <mml:m ub&gt;<td>syb&gt;<mml:r mrow&gt;</mml:r </td></mml:m 	syb> <mml:r mrow&gt;</mml:r 
263	altimg="si2.svg"> <mm. 015704.<="" 110868.="" 118,="" 201,="" 2015,="" 2022,="" aggregation="" and="" applied="" carbon="" carbon-oxygen="" computational="" containing="" defect="" donors="" formation="" in="" journal="" kinetics,="" materials="" of="" oxygen="" physics,="" science,="" silicon="" td="" thermal="" tin.=""><td>2.5</td><td>4</td></mm.>	2.5	4
264	Theoretical investigation of nitrogen-vacancy defects in silicon. AIP Advances, 2022, 12, .	1.3	4
265	Impact of Carbon on the Diffusion of Donor Atoms in Germanium. Defect and Diffusion Forum, 0, 289-292, 689-696.	0.4	3
266	Oxygen Diffusion in Ordered/Disordered Double Perovskites. ECS Transactions, 2011, 35, 1151-1154.	0.5	3
267	Fundamental Point Defect Properties in Ceramics. , 2012, , 47-64.		3
268	Temperature dependence of the pseudogap in Y1â^'zPrzBa2Cu3O7â^'Î' single crystals. Journal of Materials Science: Materials in Electronics, 2013, 24, 1146-1149.	2.2	3
269	Mechanism of dopant-vacancy association in $\hat{l}$ ±-quartz GeO2. Journal of Applied Physics, 2013, 113, .	2.5	3
270	INFLUENCE OF INTRINSIC PINNING ON THE RESISTIVE PROPERTIES OF YBa2Cu3O7-δSINGLE CRYSTALS. Modern Physics Letters B, 2013, 27, 1350220.	1.9	3

#	Article	IF	CITATIONS
271	Vacancy-oxygen defects in p-type Silâ^'xGex. Journal of Applied Physics, 2014, 116, 133502.	2.5	3
272	Silicon diffusion in germanium described by connecting point defect parameters with bulk properties. Materials Research Express, 2015, 2, 036301.	1.6	3
273	Response to "Comment on â€~Diffusion of n-type dopants in germanium' ―[Appl. Phys. Rev. 2, 036. Applied Physics Reviews, 2015, 2, 036102.	101 (2015	)l <sub>3</sub>
274	Oxygen self-diffusion in ThO <sub>2</sub> under pressure: connecting point defect parameters with bulk properties. Materials Research Express, 2016, 3, 065501.	1.6	3
275	CO <sub>2</sub> capture by Liâ€functionalized silicene. Physica Status Solidi - Rapid Research Letters, 2016, 10, 458-461.	2.4	3
276	O vacancy formation in $(Pr/Gd)BaCo < sub > 2 < / sub > O < sub > 5.5 < / sub > and the role of antisite defects. Physical Chemistry Chemical Physics, 2017, 19, 11455-11459.$	2.8	3
277	Gold and silver diffusion in germanium: a thermodynamic approach. Journal of Materials Science: Materials in Electronics, 2017, 28, 1966-1970.	2.2	3
278	Enhanced oxygen diffusion in nano-structured ceria. Journal of Materials Science: Materials in Electronics, 2018, 29, 4743-4748.	2.2	3
279	Isovalent doping and the CiOi defect in germanium. Journal of Materials Science: Materials in Electronics, 2018, 29, 4261-4265.	2.2	3
280	Composition variation and electron irradiation effects on the fluctuation conductivity in Y1–zPrzBa2Cu3O7â^Î′ single crystals. Journal of Materials Science: Materials in Electronics, 2020, 31, 19429-19436.	2.2	3
281	Encapsulation of volatile fission products in a two-dimensional dicalcium nitride electride. Journal of Applied Physics, 2020, 128, 045112.	2.5	3
282	Atomic structure and electronic properties of hydrogenated X (=C, Si, Ge, and Sn) doped TiO2: A theoretical perspective. AIP Advances, 2020, $10$ , .	1.3	3
283	The Interstitial Carbon–Dioxygen Center in Irradiated Silicon. Crystals, 2020, 10, 1005.	2.2	3
284	Encapsulation and substitution of Fe in C12A7 (12CaOâ‹7Al2O3). AIP Advances, 2020, 10, 015242.	1.3	3
285	Influence of defects on anisotropy of electrical resistivity in \$\$hbox {YBa}_2hbox {Cu}_3hbox {O}_{7-delta}\$\$. Journal of Materials Science: Materials in Electronics, 2020, 31, 7708-7714.	2.2	3
286	Influence of Uniform Compression on the Temperature Dependence of the Pseudogap of Medium-Praseodymium-Doped Y1â^'xPrxBa2Cu3O7â^'Î^ Single Crystals. Journal of Low Temperature Physics, 2021, 203, 430-436.	1.4	3
287	Defects, diffusion and dopants in the ceramic mineral "Lime- Feldspar― Journal of Asian Ceramic Societies, 2021, 9, 570-577.	2.3	3
288	Impact of oxygen on gallium doped germanium. AIP Advances, 2021, 11, 065122.	1.3	3

#	Article	IF	Citations
289	Defects, diffusion and dopants in Li8SnO6. Heliyon, 2021, 7, e07460.	3.2	3
290	Ultrafast epitaxial growth of CuO nanowires using atmospheric pressure plasma with enhanced electrocatalytic and photocatalytic activities. Nano Select, 2022, 3, 627-642.	3.7	3
291	COEXISTENCE OF DIFFERENT TYPES OF TRANSVERSE CONDUCTIVITY IN <font>Y</font> <sub>1-x</sub> <font>Pr</font> <sub>x</sub> <font>Ba</font> <sub>2</sub> <font>Cu</font> < O <sub>7-Î</sub> SINGLE CRYSTALS WITH DIFFERENT PRASEODYMIUM CONCENTRATIONS. Modern Physics Letters B. 2013. 27. 1350198.	sub>3 <td>ıb<sub>2</sub><font></font></td>	ıb <sub>2</sub> <font></font>
292	Modeling defect reactions processes to study the impact of carbon on the production and conversion of A-centers in silicon. Journal of Materials Science: Materials in Electronics, 2014, 25, 4872-4876.	2.2	2
293	Electromagnetic excitation in complex materials. Journal of Materials Science: Materials in Electronics, 2014, 25, 4273-4277.	2.2	2
294	IR studies of the oxygen and carbon precipitation processes in electron irradiated tin-doped silicon. Journal of Materials Science: Materials in Electronics, 2017, 28, 10298-10312.	2.2	2
295	Grain Boundaries: Engineering Transport in Manganites by Tuning Local Nonstoichiometry in Grain Boundaries (Adv. Mater. 4/2019). Advanced Materials, 2019, 31, 1970026.	21.0	2
296	The Effect of the Precursor Solution's Pretreatment on the Properties and Microstructure of the SCS Final Nanomaterials. Applied Sciences (Switzerland), 2019, 9, 1200.	2.5	2
297	Atomic-scale studies of garnet-type Mg3Fe2Si3O12: Defect chemistry, diffusion and dopant properties. Journal of Power Sources Advances, 2020, 3, 100016.	5.1	2
298	Effect of hydrogen on the electrical resistance of NbSe2 in a wide temperature range. Journal of Materials Science: Materials in Electronics, 2021, 32, 13588-13593.	2.2	2
299	One-dimensional yttrium silicide electride (Y5Si3:eâ^²) for encapsulation of volatile fission products. Journal of Applied Physics, 2021, 129, .	2.5	2
300	Interstitial lithium doping in SrTiO <sub>3</sub> . AIP Advances, 2021, 11, 075029.	1.3	2
301	Effect of high pressure on temperature dependences of the resistivity in the ab-plane of Y0.77Pr0.23Ba2Cu3O7-δsingle crystals. Journal of Materials Science: Materials in Electronics, 2022, 33, 9875-9884.	2.2	2
302	Nitrogen-vacancy defects in germanium. AIP Advances, 2022, 12, 045110.	1.3	2
303	The <mml:math <="" altimg="si1.svg" display="inline" td="" xmlns:mml="http://www.w3.org/1998/Math/MathML"><td></td><td></td></mml:math>		

#	Article	IF	CITATIONS
307	Relative concentrations of carbon related defects in silicon. Journal of Materials Science: Materials in Electronics, 2016, 27, 11268-11272.	2.2	1
308	Effect of Hafnium Impurities on the Magnetoresistance of $\frac{YBa}_{2}hbox \{Cu\}_{3}hbox \{O\}_{7-delta} $ YBa 2 Cu 3 O 7 - $\hat{I}$ . Journal of Low Temperature Physics, 2017, 186, 285-293.	1.4	1
309	The COV defect in neutron irradiated silicon: An infrared spectroscopy study. Materials Science in Semiconductor Processing, 2018, 75, 283-287.	4.0	1
310	The Ci(SiI)n defect in neutron-irradiated silicon. Journal of Materials Science: Materials in Electronics, 2020, 31, 930-934.	2,2	1
311	Defects, Diffusion and Dopants in Sillimanite. Minerals (Basel, Switzerland), 2020, 10, 857.	2.0	1
312	Electron irradiation and annealing effects on the pseudogap in optimally doped YBCO single crystals. Modern Physics Letters B, 2020, 34, 2050151.	1.9	1
313	Influence of high pressure on the temperature dependence of electrical resistivity of Y1-xPrxBa2Cu3O7- $\hat{l}$ single crystals. Solid State Communications, 2021, 327, 114205.	1.9	1
314	Substitutional carbon-dioxygen center in irradiated silicon. Materials Science in Semiconductor Processing, 2021, 127, 105661.	4.0	1
315	Core–shell carbon-polymer quantum dot passivation for near infrared perovskite light emitting diodes. JPhys Photonics, 2022, 4, 034007.	4.6	1
316	Publisher's Note: Phase stability and the arsenic vacancy defect in InxGalâ^'xAs [Phys. Rev. B84, 184108 (2011)]. Physical Review B, 2011, 84, .	3.2	0
317	Atomic-scale computer simulation of functional materials: methodologies and applications. , 2012, , 643-662e.		0
318	Evolution of the metal–insulator transition in oxygen nonstoichiometric YBa2Cu3O7â <sup>~</sup> δ single crystals under pressure. Journal of Materials Science: Materials in Electronics, 2013, 24, 3132-3135.	2,2	0
319	Semi-empirical modelling of the di-interstitial defect in silicon. Journal of Materials Science: Materials in Electronics, 2014, 25, 5441-5445.	2.2	0
320	Effect of Structural Relaxation on the Metalâ€"Insulator Transition in Heavily Underdoped YBa \$\$_2\$\$ 2 Cu \$\$_3\$\$ 3 O \$\$_{7-delta}\$\$ 7 - Î Single Crystals. Journal of Low Temperature Physics, 2015, 180, 277-283.	1.4	0
321	Transverse resistance in HoBa2Cu3O7â^î^single crystals. Modern Physics Letters B, 2015, 29, 1550232.	1.9	0
322	Diffusion of the superconducting transition in HTSC. Journal of Materials Science: Materials in Electronics, 2017, 28, 10862-10865.	2.2	0
323	Computational study of energy materials. , 2018, , 263-281.		0
324	Mayenite Electrides and Their Doped Forms for Oxygen Reduction Reaction in Solid Oxide Fuel Cells. Energies, 2020, 13, 4978.	3.1	0

#	Article	IF	CITATIONS
325	Defects and Calcium Diffusion in Wollastonite. Chemistry, 2020, 2, 937-946.	2.2	0
326	Oxygen migration in doped BaGdInO4. Solid State Ionics, 2021, 369, 115729.	2.7	0
327	Relaxation of the electric resistance in YBa2Cu3O7â^'x single crystals at room temperature. Modern Physics Letters B, 2017, 31, 1750179.	1.9	0
328	Fundamental Point Defect Properties in Ceramics. , 2020, , 50-73.		0