

Gyeong S Hwang

List of Publications by Year in descending order

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148
papers

6,442
citations

87888

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69250

77
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152
all docs

152
docs citations

152
times ranked

9305
citing authors

#	ARTICLE	IF	CITATIONS
1	Long-life Li/polysulphide batteries with high sulphur loading enabled by lightweight three-dimensional nitrogen/sulphur-codoped graphene sponge. <i>Nature Communications</i> , 2015, 6, 7760.	12.8	923
2	Freestanding 1T MoS ₂ /graphene heterostructures as a highly efficient electrocatalyst for lithium polysulfides in Li-S batteries. <i>Energy and Environmental Science</i> , 2019, 12, 344-350.	30.8	510
3	Factors in the Metal Doping of BiVO ₄ for Improved Photoelectrocatalytic Activity as Studied by Scanning Electrochemical Microscopy and First-Principles Density-Functional Calculation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 17870-17879.	3.1	409
4	On the Origin of the Enhanced Supercapacitor Performance of Nitrogen-Doped Graphene. <i>Journal of Physical Chemistry C</i> , 2013, 117, 5610-5616.	3.1	230
5	A Computational Study of the Interfacial Structure and Capacitance of Graphene in [BMIM][PF ₆] Ionic Liquid. <i>Journal of the Electrochemical Society</i> , 2013, 160, A1-A10.	2.9	229
6	Structure and Properties of Li ⁺ Si Alloys: A First-Principles Study. <i>Journal of Physical Chemistry C</i> , 2011, 115, 2514-2521.	3.1	187
7	High-Performance Lithium-Sulfur Batteries with a Self-Supported, 3D Li ₂ S-Doped Graphene Aerogel Cathodes. <i>Advanced Energy Materials</i> , 2016, 6, 1501355.	19.5	183
8	Large Thermoelectric Figure-of-Merits from SiGe Nanowires by Simultaneously Measuring Electrical and Thermal Transport Properties. <i>Nano Letters</i> , 2012, 12, 2918-2923.	9.1	181
9	Nanocolumnar Germanium Thin Films as a High-Rate Sodium-Ion Battery Anode Material. <i>Journal of Physical Chemistry C</i> , 2013, 117, 18885-18890.	3.1	175
10	Epoxide reduction with hydrazine on graphene: A first principles study. <i>Journal of Chemical Physics</i> , 2009, 131, 064704.	3.0	151
11	On the Role of Pd Ensembles in Selective H ₂ O ₂ Formation on PdAu Alloys. <i>Journal of Physical Chemistry C</i> , 2009, 113, 12943-12945.	3.1	125
12	A Comparative First-Principles Study of the Structure, Energetics, and Properties of Li-M (M = Si, Ge), Tj ETQqO 0,0,rgBT /Overlock 10	3.1	125
13	A Comparative First-Principles Study on Sodiation of Silicon, Germanium, and Tin for Sodium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2015, 119, 14843-14850.	3.1	95
14	Reaction mechanisms of aqueous monoethanolamine with carbon dioxide: a combined quantum chemical and molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 831-839.	2.8	95
15	Adsorption of Au atoms on stoichiometric and reduced TiO ₂ (110) rutile surfaces: a first principles study. <i>Surface Science</i> , 2003, 542, 72-80.	1.9	87
16	On the Nature and Behavior of Li Atoms in Si: A First Principles Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 17942-17946.	3.1	82
17	Electron small polarons and their transport in bismuth vanadate: a first principles study. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 256-260.	2.8	81
18	Lithiation Behavior of Silicon-Rich Oxide (SiO _{1/3}): A First-Principles Study. <i>Chemistry of Materials</i> , 2013, 25, 3435-3440.	6.7	80

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19	Tailoring the performance of graphene-based supercapacitors using topological defects: A theoretical assessment. <i>Carbon</i> , 2014, 68, 734-741.	10.3	78
20	Structural phase-dependent hole localization and transport in bismuth vanadate. <i>Physical Review B</i> , 2013, 87, .	3.2	71
21	Fundamental Understanding of CO ₂ Capture and Regeneration in Aqueous Amines from First-Principles Studies: Recent Progress and Remaining Challenges. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 6887-6899.	3.7	70
22	Relative contributions of quantum and double layer capacitance to the supercapacitor performance of carbon nanotubes in an ionic liquid. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 19741-19747.	2.8	68
23	Effects of vacancy defects on thermal conductivity in crystalline silicon: A nonequilibrium molecular dynamics study. <i>Physical Review B</i> , 2011, 83, .	3.2	65
24	Growth and structure of small gold particles on rutileTiO ₂ (110). <i>Physical Review B</i> , 2005, 72, .	3.2	62
25	Dynamics of oxygen species on reducedTiO ₂ (110)rutile. <i>Physical Review B</i> , 2004, 70, .	3.2	60
26	Geometric Parameter Effects on Ensemble Contributions to Catalysis: H ₂ O ₂ Formation from H ₂ and O ₂ on AuPd Alloys. A First Principles Study. <i>Journal of Physical Chemistry C</i> , 2010, 114, 14922-14928.	3.1	56
27	Hybrid density functional study of the structural, bonding, and electronic properties of bismuth vanadate. <i>Physical Review B</i> , 2012, 86, .	3.2	55
28	Impact of Graphene Edges on Enhancing the Performance of Electrochemical Double Layer Capacitors. <i>Journal of Physical Chemistry C</i> , 2014, 118, 21770-21777.	3.1	54
29	Curvature Effects on the Interfacial Capacitance of Carbon Nanotubes in an Ionic Liquid. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23539-23546.	3.1	53
30	Magnetoconvection in a rotating layer of nanofluid. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2014, 9, 663-677.	1.5	50
31	The Bright Future for Electrode Materials of Energy Devices: Highly Conductive Porous Na-Embedded Carbon. <i>Nano Letters</i> , 2016, 16, 8029-8033.	9.1	50
32	On the origin of the significant difference in lithiation behavior between silicon and germanium. <i>Journal of Power Sources</i> , 2014, 263, 252-258.	7.8	44
33	On the influence of polarization effects in predicting the interfacial structure and capacitance of graphene-like electrodes in ionic liquids. <i>Journal of Chemical Physics</i> , 2015, 142, 024701.	3.0	44
34	Toward a Reversible Calcium-Sulfur Battery with a Lithium-Ion Mediation Approach. <i>Advanced Energy Materials</i> , 2019, 9, 1803794.	19.5	43
35	On the origin of Si nanocrystal formation in a Si suboxide matrix. <i>Journal of Applied Physics</i> , 2007, 102, .	2.5	41
36	Role of Small Pd Ensembles in Boosting CO Oxidation in AuPd Alloys. <i>Journal of Physical Chemistry Letters</i> , 2012, 3, 566-570.	4.6	40

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37	Large Capacitance Enhancement Induced by Metal-Doping in Graphene-Based Supercapacitors: A First-Principles-Based Assessment. ACS Applied Materials & Interfaces, 2014, 6, 12168-12176.	8.0	40
38	Diffusion and dissociation of neutral divacancies in crystalline silicon. Physical Review B, 2002, 65, .	3.2	39
39	Structure and Li ⁺ ion transport in a mixed carbonate/LiPF ₆ electrolyte near graphite electrode surfaces: a molecular dynamics study. Physical Chemistry Chemical Physics, 2016, 18, 27868-27876.	2.8	39
40	On the origin of preferred bicarbonate production from carbon dioxide (CO ₂) capture in aqueous 2-amino-2-methyl-1-propanol (AMP). Physical Chemistry Chemical Physics, 2015, 17, 29184-29192.	2.8	38
41	Force-matching-based parameterization of the Stillinger-Weber potential for thermal conduction in silicon. Physical Review B, 2012, 85, .	3.2	37
42	Communication: Enhanced oxygen reduction reaction and its underlying mechanism in Pd-Ir-Co trimetallic alloys. Journal of Chemical Physics, 2013, 139, 201104.	3.0	37
43	Charging Rate Dependence of Ion Migration and Stagnation in Ionic-Liquid-Filled Carbon Nanopores. Journal of Physical Chemistry C, 2016, 120, 24560-24567.	3.1	35
44	O ₂ -coverage-dependent CO oxidation on reduced TiO ₂ (110): A first principles study. Journal of Chemical Physics, 2006, 125, 144706.	3.0	34
45	Structure and stability of small compact self-interstitial clusters in crystalline silicon. Physical Review B, 2008, 77, .	3.2	34
46	Pd ensemble effects on oxygen hydrogenation in AuPd alloys: A combined density functional theory and Monte Carlo study. Catalysis Today, 2011, 165, 138-144.	4.4	34
47	Structure of small Au _n , Ag _n , and Cu _n clusters (n=2~4) on rutile TiO ₂ (110): A density functional theory study. Computational and Theoretical Chemistry, 2006, 771, 129-133.	1.5	31
48	Mechanism of thermal conductivity suppression in doped silicon studied with nonequilibrium molecular dynamics. Physical Review B, 2012, 86, .	3.2	30
49	A channel for dimer flipping on the Si(001) surface. Surface Science, 2000, 465, L789-L793.	1.9	27
50	Structure, energetics, and bonding of amorphous Au ⁺ Si alloys. Journal of Chemical Physics, 2007, 127, 224710.	3.0	27
51	Growth and shape transition of small silicon self-interstitial clusters. Physical Review B, 2008, 78, .	3.2	27
52	Origin of nonlocal interactions in adsorption of polar molecules on Si(001)-2 \times 1. Journal of Chemical Physics, 2005, 122, 164706.	3.0	26
53	Structure, stability, and diffusion of arsenic-silicon interstitial pairs. Applied Physics Letters, 2005, 87, 231905.	3.3	26
54	First-principles assessment of CO ₂ capture mechanisms in aqueous piperazine solution. Physical Chemistry Chemical Physics, 2016, 18, 25296-25307.	2.8	26

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55	Silicon interstitials at SiO ₂ interfaces: Density functional calculations. Physical Review B, 2005, 72, .	3.2	24
56	First-principles study of the mechanical and optical properties of amorphous hydrogenated silicon and silicon-rich silicon oxide. Physical Review B, 2010, 81, .	3.2	24
57	Atomic Arrangements of AuPt/Pt(111) and AuPd/Pd(111) Surface Alloys: A Combined Density Functional Theory and Monte Carlo Study. Journal of Physical Chemistry C, 2010, 114, 21516-21523.	3.1	24
58	Structure and Interconversion of Oxygen-Vacancy-Related Defects on Amorphous Silica. Physical Review Letters, 2006, 97, 066101.	7.8	23
59	Theoretical Analysis of Thermal Transport in Graphene Supported on Hexagonal Boron Nitride: The Importance of Strong Adhesion Due to π -Bond Polarization. Physical Review Applied, 2016, 6, .	3.8	23
60	Nucleation and growth of 1B metal clusters on rutile TiO ₂ (110): Atomic level understanding from first principles studies. Catalysis Today, 2005, 105, 78-84.	4.4	22
61	Molecular mechanisms for thermal degradation of CO ₂ -loaded aqueous monoethanolamine solution: a first-principles study. Physical Chemistry Chemical Physics, 2019, 21, 22132-22139.	2.8	22
62	Interstitial-Mediated Arsenic Clustering in Ultrashallow Junction Formation. Electrochemical and Solid-State Letters, 2006, 9, G354.	2.2	21
63	Strain-Induced Formation of Surface Defects in Amorphous Silica: A Theoretical Prediction. Physical Review Letters, 2008, 100, 076104.	7.8	21
64	A comparative theoretical study of Au, Ag and Cu adsorption on TiO ₂ (110) rutile surfaces. Korean Journal of Chemical Engineering, 2004, 21, 537-547.	2.7	20
65	Synergetic Role of Photogenerated Electrons and Holes in the Oxidation of CO to CO ₂ on Reduced TiO ₂ (110): A First-Principles Study. ACS Catalysis, 2014, 4, 4051-4056.	11.2	20
66	Interaction of oxygen with polystyrene and polyethylene polymer films: A mechanistic study. Journal of Applied Physics, 2020, 127, .	2.5	20
67	A computational analysis of graphene adhesion on amorphous silica. Journal of Applied Physics, 2013, 113, 164901.	2.5	19
68	Molecular Insights into the Complex Relationship between Capacitance and Pore Morphology in Nanoporous Carbon-based Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 34659-34667.	8.0	19
69	Pseudocubic Phase Tungsten Oxide as a Photocatalyst for Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2019, 2, 8792-8800.	5.1	19
70	Theoretical determination of stable fourfold coordinated vacancy clusters in silicon. Physical Review B, 2008, 78, .	3.2	18
71	What is the thermal conductivity limit of silicon germanium alloys?. Physical Chemistry Chemical Physics, 2016, 18, 19544-19548.	2.8	18
72	Effects of P on amorphous chemical vapor deposition Ru-P alloy films for Cu interconnect liner applications. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 974-979.	2.1	17

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73	On the Nature and Origin of Si Surface Segregation in Amorphous AuSi Alloys. Journal of Physical Chemistry C, 2010, 114, 3037-3041.	3.1	17
74	Molecular insights into the enhanced rate of CO2 absorption to produce bicarbonate in aqueous 2-amino-2-methyl-1-propanol. Physical Chemistry Chemical Physics, 2017, 19, 32116-32124.	2.8	16
75	Controlling Plasmon-Enhanced Fluorescence via Intersystem Crossing in Photoswitchable Molecules. Small, 2017, 13, 1701763.	10.0	15
76	Diffusion of the Diboron Pair in Silicon. Physical Review Letters, 2002, 89, 055901.	7.8	14
77	On the origin of anisotropic lithiation in crystalline silicon over germanium: A first principles study. Applied Surface Science, 2014, 323, 78-81.	6.1	14
78	Importance of Pd monomer pairs in enhancing the oxygen reduction reaction activity of the AuPd(1 0) Tj ETQq0 0 0 rgBT /Overlock 10 T	4.4	14
79	Partial oxidation of methane to methanol by isolated Pt catalyst supported on a CeO2 nanoparticle. Journal of Chemical Physics, 2020, 152, 054715.	3.0	14
80	Interaction of neutral vacancies and interstitials with theSi(001)surface. Physical Review B, 2004, 70, .	3.2	13
81	Interstitial-mediated mechanisms of As and P diffusion in Si: Gradient-corrected density-functional calculations. Physical Review B, 2006, 74, .	3.2	13
82	<i>Ab initio</i> parameterized valence force field for the structure and energetics of amorphous SiO ₂		

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91	Combined experimental and computational study on the promising monoethanolamine+2-(ethylamino)ethanol+2-sulfolane biphasic aqueous solution for CO ₂ absorption. <i>Chemical Engineering Journal</i> , 2022, 446, 136674.	12.7	11
92	Atomistic structural description of the Si(001)/SiO ₂ interface: The influence of different Keating-like potential parameters. <i>Journal of Applied Physics</i> , 2011, 109, 113519.	2.5	10
93	Anomalous Facile Carbamate Formation at High Stripping Temperatures from Carbon Dioxide Reaction with 2-Amino-2-methyl-1-propanol in Aqueous Solution. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 18671-18677.	6.7	10
94	Dissociative chemisorption of methyl fluoride and its implications for atomic layer etching of silicon nitride. <i>Applied Surface Science</i> , 2021, 543, 148557.	6.1	10
95	An experimental/computational study of steric hindrance effects on CO ₂ absorption in (non)aqueous amine solutions. <i>AIChE Journal</i> , 2022, 68, .	3.6	10
96	Shouldering in B diffusion profiles in Si: Role of di-boron diffusion. <i>Applied Physics Letters</i> , 2003, 83, 3501-3503.	3.3	9
97	Surface chemistry effects on vacancy and interstitial annihilation on Si(001). <i>Physica Status Solidi (B): Basic Research</i> , 2004, 241, 2303-2312.	1.5	9
98	Structure and dynamics of the diarsenic complex in crystalline silicon. <i>Physical Review B</i> , 2005, 72, .	3.2	9
99	Biaxial strain effects on the structure and stability of self-interstitial clusters in silicon. <i>Physical Review B</i> , 2009, 79, .	3.2	9
100	Atomic Arrangements in AuPt/Pt(100) and AuPd/Pd(100) Surface Alloys: A Monte Carlo Study Using First Principles-Based Cluster Expansions. <i>Journal of Physical Chemistry C</i> , 2011, 115, 21205-21210.	3.1	9
101	Role of the surface–subsurface interlayer interaction in enhancing oxygen hydrogenation to water in Pd ₃ Co alloy catalysts. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 12118.	2.8	9
102	Anomalous Staged Lithiation of Gold-Coated Silicon Nanowires: A Combined In Situ Characterization and First-Principles Study. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 16976-16983.	8.0	9
103	Recent progress in first-principles simulations of anode materials and interfaces for lithium ion batteries. <i>Current Opinion in Chemical Engineering</i> , 2016, 13, 75-81.	7.8	9
104	Theoretical evaluation of ethylene carbonate anion transport and its impact on solid electrolyte interphase formation. <i>Electrochimica Acta</i> , 2018, 266, 326-331.	5.2	9
105	Theoretical evaluation of thermal decomposition of dichlorosilane for plasma-enhanced atomic layer deposition of silicon nitride: the important role of surface hydrogen. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 29152-29158.	2.8	9
106	Boron diffusion in strained Si: A first-principles study. <i>Journal of Applied Physics</i> , 2004, 96, 5543-5547.	2.5	8
107	Two-dimensional arrangement of CH ₃ NH ₂ adsorption on Si(0 0 1)-2 Å ⁻¹ . <i>Chemical Physics Letters</i> , 2004, 385, 144-148.	2.6	8
108	Formation and structure of vacancy defects in silicon: Combined Metropolis Monte Carlo, tight-binding molecular dynamics, and density functional theory calculations. <i>Physical Review B</i> , 2009, 80, .	3.2	8

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109	Theoretical characterization of silicon self-interstitial clusters in uniform strain fields. <i>Physical Review B</i> , 2009, 80, .	3.2	8
110	Prediction of the formation of stable periodic self-interstitial cluster chains $[(11\bar{1})_m, m=1\text{--}4]$ in Si under biaxial strain. <i>Applied Physics Letters</i> , 2009, 94, 264101.	3.3	8
111	Revisit to the Ising model for order-disorder phase transition on Si(001). <i>Surface Science</i> , 2004, 554, 150-158.	1.9	7
112	Mechanisms of monovacancy annihilation and type-A defect creation on Si(001)-2 \times 1. <i>Surface Science</i> , 2004, 555, 187-192.	1.9	7
113	Integrated atomistic modelling of interstitial defect growth in silicon. <i>Molecular Simulation</i> , 2009, 35, 867-879.	2.0	7
114	First-Principles Assessment of Anomalous Thermal Degradation of Aqueous 2-Amino-2-methyl-1-propanol for CO ₂ Capture. <i>Energy & Fuels</i> , 2021, 35, 16705-16712.	5.1	7
115	Function of subsurface boron on Si(001)-2 \times 1: water adsorption. <i>Surface Science</i> , 2003, 547, L882-L886.	1.9	6
116	Role of structural disorder in optical absorption in silicon. <i>Physical Review B</i> , 2010, 82, .	3.2	6
117	On the Importance of Regulating Hydroxyl Coverage on the Basal Plane of Graphene Oxide for Supercapacitors. <i>ChemElectroChem</i> , 2016, 3, 741-748.	3.4	6
118	Molecular dynamics investigation of reduced ethylene carbonate aggregation at the onset of solid electrolyte interphase formation. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22449-22455.	2.8	5
119	Strain effects on the stability and structure of vacancy clusters in Si: A first-principles study. <i>Physical Review B</i> , 2010, 81, .	3.2	4
120	Role of different Pd/Pt ensembles in determining CO chemisorption on Au-based bimetallic alloys: A first-principles study. <i>Applied Surface Science</i> , 2015, 332, 409-418.	6.1	4
121	Agent molecule modulated low-temperature activation of solid-state lithium-ion transport for polymer electrolytes. <i>Journal of Power Sources</i> , 2021, 505, 229917.	7.8	4
122	Intriguing Thermal Degradation Behavior of Aqueous Piperazine for Carbon Dioxide Capture: A First-Principles Assessment. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 9584-9590.	6.7	4
123	Effects of Subsurface Boron and Phosphorus on Surface Reactivity of Si(001): Water and Ammonia Adsorption. <i>Journal of Physical Chemistry B</i> , 2004, 108, 16147-16153.	2.6	3
124	Interstitial-based boron diffusion dynamics in amorphous silicon. <i>Applied Physics Letters</i> , 2008, 93, .	3.3	3
125	Formation, nature, and stability of the arsenic-silicon-oxygen alloy for plasma doping of non-planar silicon structures. <i>Applied Physics Letters</i> , 2014, 105, 262102.	3.3	3
126	First-Principles Mechanistic Study of the Initial Growth of SrO by Atomic Layer Deposition on TiO ₂ -Terminated SrTiO ₃ (001). <i>Journal of Physical Chemistry C</i> , 2020, 124, 28116-28122.	3.1	3

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127	Arsenic defect complexes at SiO ₂ /Si interfaces: A density functional theory study. <i>Physical Review B</i> , 2009, 80, .	3.2	2
128	Defect-Assisted Covalent Binding of Graphene to an Amorphous Silica Surface: A Theoretical Prediction. <i>ChemPhysChem</i> , 2011, 12, 2155-2159.	2.1	2
129	First-principles description of electrocatalytic characteristics of graphene-like materials. <i>Journal of Chemical Physics</i> , 2020, 153, 214704.	3.0	2
130	Strong thermal conductivity dependence on arsenic-vacancy complex formation in arsenic-doped silicon. <i>Journal of Applied Physics</i> , 2019, 126, 195104.	2.5	1
131	Kinetic Selectivity of Lithium Alkyl Carbonate Formation from Combination Reactions of Ethylene Carbonate Radical Anions. <i>Journal of Physical Chemistry C</i> , 2020, 124, 25754-25759.	3.1	1
132	First-principles prediction on antimony-doping effects on the cyclic stability of tin anodes for lithium-ion batteries. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 17542-17546.	2.8	1
133	Behavior of Si Interstitials and Boron-Interstitial Pairs at the Si/SiO ₂ Interface. <i>Materials Research Society Symposia Proceedings</i> , 2004, 810, 398.	0.1	0
134	Diffusion of Fluorine-Silicon Interstitial Complex in Crystalline Silicon. <i>Materials Research Society Symposia Proceedings</i> , 2005, 864, 911.	0.1	0
135	Role of Interstitials in As TED and Clustering in Crystalline Silicon. <i>Materials Research Society Symposia Proceedings</i> , 2005, 864, 851.	0.1	0
136	Tunnel oxide thickness dependence of activation energy for SiGe quantum dot flash memory. , 2005, , .		0
137	Understanding of the Synthesis and Structure of Si Nanocrystals in an Oxide Matrix from First Principles Based Atomistic Modeling. <i>Materials Research Society Symposia Proceedings</i> , 2006, 958, 1.	0.1	0
138	Ab-Initio Study of Boron Diffusion Retardation in Si _{1-x} Ge _x . <i>Materials Research Society Symposia Proceedings</i> , 2006, 912, 1.	0.1	0
139	Multiscale Modeling of Growth and Structure of Silicon Nanoparticles in an Oxide Matrix. <i>Materials Research Society Symposia Proceedings</i> , 2006, 978, .	0.1	0
140	Mechanisms for Interstitial-Mediated Transient Enhanced Diffusion of N-type Dopants. <i>Materials Research Society Symposia Proceedings</i> , 2006, 912, 1.	0.1	0
141	An Experimental and Simulation Study of Arsenic Diffusion Behavior in Point Defect Engineered Silicon. <i>Materials Research Society Symposia Proceedings</i> , 2007, 994, 1.	0.1	0
142	Chemical Routes to Ultra Thin Films for Copper Barriers and Liners. <i>Materials Research Society Symposia Proceedings</i> , 2007, 990, 1.	0.1	0
143	First-Principles Prediction of Optical Absorption Enhancement for Si Native Defect Clusters under Biaxial Strain. <i>Electrochemical and Solid-State Letters</i> , 2011, 14, P1.	2.2	0
144	Fundamental insight into control of thermal conductivity in silicon-germanium alloy nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1707, 31.	0.1	0

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145	Materials science of Ru and Ru alloy thin films for barrier applications. , 2016, , .		0
146	Fundamentals of Capacitive Charge Storage in Carbon-Based Supercapacitors. Springer Series in Materials Science, 2021, , 559-586.	0.6	0
147	Silicon-based anode materials for lithium-ion batteries. Series in Materials Science and Engineering, 2017, , 443-460.	0.1	0
148	Plasmonic Nanostructures: Controlling Plasmon-Enhanced Fluorescence via Intersystem Crossing in Photoswitchable Molecules (Small 38/2017). Small, 2017, 13, .	10.0	0