

# Chandra Veer Singh

## List of Publications by Year in descending order

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Version: 2024-02-01

162  
papers

7,141  
citations

47006

47  
h-index

69250

77  
g-index

165  
all docs

165  
docs citations

165  
times ranked

8324  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structurally ordered high-entropy intermetallic nanoparticles with enhanced C-C bond cleavage for ethanol oxidation. <i>SmartMat</i> , 2023, 4, .	10.7	23
2	Machine learning-enabled band gap prediction of monolayer transition metal chalcogenide alloys. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 4653-4665.	2.8	7
3	High-Strength, Microporous, Two-Dimensional Polymer Thin Films with Rigid Benzoxazole Linkage. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 1861-1873.	8.0	7
4	Machine learned interatomic potentials using random features. <i>Npj Computational Materials</i> , 2022, 8, .	8.7	11
5	Two-dimensional square metal organic framework as promising cathode material for lithium-sulfur battery with high theoretical energy density. <i>Journal of Colloid and Interface Science</i> , 2022, 613, 435-446.	9.4	11
6	Mechanical Size Effect of Freestanding Nanoconfined Polymer Films. <i>Macromolecules</i> , 2022, 55, 1248-1259.	4.8	18
7	Interface Engineering of Co/CoMoN/NF Heterostructures for High-Performance Electrochemical Overall Water Splitting. <i>Advanced Science</i> , 2022, 9, e2105313.	11.2	90
8	Chemical and molecular structure transformations in atomistic conformation of cellulose nanofibers under thermal environment. <i>Npj Materials Degradation</i> , 2022, 6, .	5.8	1
9	Fast-Charging Halide-Based All-Solid-State Batteries by Manipulation of Current Collector Interface. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	20
10	Interplay between Thermal Stress and Interface Binding on Fracture of WS <sub>2</sub> Monolayer with Triangular Voids. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 16876-16884.	8.0	10
11	Friction of Ti <sub>3</sub> C <sub>2</sub> T <sub>x</sub> MXenes. <i>Nano Letters</i> , 2022, 22, 3356-3363.	9.1	46
12	High-throughput and machine-learning accelerated design of high entropy alloy catalysts. <i>Trends in Chemistry</i> , 2022, 4, 577-579.	8.5	8
13	Mechanistic Origin of Orientation-Dependent Substructure Evolution in Aluminum and Aluminum-Magnesium Alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2022, 53, 2689-2707.	2.2	4
14	Extraordinary lattice thermal conductivity of gold sulfide monolayers. <i>Nanoscale Advances</i> , 2022, 4, 2873-2883.	4.6	2
15	Automatically Capturing Key Features for Predicting Superionic Conductivity of Solid-State Electrolytes Using a Neural Network. <i>ACS Applied Energy Materials</i> , 2022, 5, 8042-8048.	5.1	2
16	Mechanical reliability of monolayer MoS <sub>2</sub> and WSe <sub>2</sub> . <i>Matter</i> , 2022, 5, 2975-2989.	10.0	5
17	Insights on the dual role of two-dimensional materials as catalysts and supports for energy and environmental catalysis. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2018-2042.	10.3	34
18	Mechanochemistry for ammonia synthesis under mild conditions. <i>Nature Nanotechnology</i> , 2021, 16, 325-330.	31.5	141



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37	Quantum well states and sizable Rashba splitting on Pb induced $\hat{\pm}$ -phase Bi/Si(111) surface reconstruction. <i>Nanoscale</i> , 2021, 13, 16622-16628.	5.6	5
38	Friction of magnetene, a non- $\hat{\pm}$ van der Waals 2D material. <i>Science Advances</i> , 2021, 7, eabk2041.	10.3	21
39	Eggshell-like MoS <sub>2</sub> Nanostructures with Negative Curvature and Stepped Faces for Efficient Hydrogen Evolution Reactions. <i>ACS Applied Nano Materials</i> , 2021, 4, 14086-14093.	5.0	5
40	Size effects in strengthening of NiCo multilayers with modulated microstructures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 771, 138581.	5.6	12
41	Performance Analysis of Composite Helicopter Blade Using Synergistic Damage Mechanics Approach. <i>AIAA Journal</i> , 2020, 58, 968-976.	2.6	7
42	Predicting aggregation energy for single atom bimetallic catalysts on clean and O* adsorbed surfaces through machine learning models. <i>Catalysis Science and Technology</i> , 2020, 10, 86-98.	4.1	29
43	Temperature dependence of grain boundary excess free volume. <i>Scripta Materialia</i> , 2020, 178, 71-76.	5.2	29
44	Strength of graphene with curvilinear grain boundaries. <i>Carbon</i> , 2020, 158, 808-817.	10.3	11
45	Neural Network-Assisted Development of High-Entropy Alloy Catalysts: Decoupling Ligand and Coordination Effects. <i>Matter</i> , 2020, 3, 1318-1333.	10.0	83
46	Electrolyte-Phobic Surface for the Next-Generation Nanostructured Battery Electrodes. <i>Nano Letters</i> , 2020, 20, 7455-7462.	9.1	25
47	Transition metal- $\hat{\pm}$ N <sub>4</sub> embedded black phosphorus carbide as a high-performance bifunctional electrocatalyst for ORR/OER. <i>Nanoscale</i> , 2020, 12, 18721-18732.	5.6	39
48	Phase Evolution of a Prenucleator for Fast Li Nucleation in All-Solid-State Lithium Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2001191.	19.5	17
49	Computational screening of homo and hetero transition metal dimer catalysts for reduction of CO <sub>2</sub> to C <sub>2</sub> products with high activity and low limiting potential. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21241-21254.	10.3	51
50	Materials perspective on new lithium chlorides and bromides: insights into thermo-physical properties. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 22758-22767.	2.8	15
51	Structure-Dependent Wear and Shear Mechanics of Nanostructured MoS <sub>2</sub> Coatings. <i>Advanced Materials Interfaces</i> , 2020, 7, 1901870.	3.7	13
52	Microtissue Engineering Root Dentin with Photodynamically Cross-linked Nanoparticles Improves Fatigue Resistance of Endodontically Treated Teeth. <i>Journal of Endodontics</i> , 2020, 46, 668-674.	3.1	13
53	Determining the limiting factor of the electrochemical stability window for PEO-based solid polymer electrolytes: main chain or terminal $\hat{\pm}$ OH group?. <i>Energy and Environmental Science</i> , 2020, 13, 1318-1325.	30.8	342
54	A triple atom catalyst with ultrahigh loading potential for nitrogen electrochemical reduction. <i>Journal of Materials Chemistry A</i> , 2020, 8, 15086-15093.	10.3	48

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55	Effect of He on the Order-Disorder Transition in Ni <sub>3</sub> Al under Irradiation. Physical Review Letters, 2020, 124, 075901.	7.8	9
56	Fatigue of graphene. Nature Materials, 2020, 19, 405-411.	27.5	110
57	Dramatic improvement in the performance of graphene as Li/Na battery anodes with suitable electrolytic solvents. Carbon, 2020, 161, 570-576.	10.3	12
58	Toughening of graphene-based polymer nanocomposites via tuning chemical functionalization. Composites Science and Technology, 2020, 194, 108140.	7.8	44
59	Compression-induced resistance of singlet oxygen dissociation on phosphorene. Physical Review Materials, 2020, 4, .	2.4	0
60	Hindered surface diffusion of bonded molecular clusters mediated by surface defects. Physical Review Materials, 2020, 4, .	2.4	1
61	Atomic structure of Ni-Nb-Y amorphous alloys and water-surface adsorption characteristics. Computational Materials Science, 2019, 169, 109095.	3.0	3
62	Understanding the Independent and Interdependent Role of Water and Oxidation on the Tribology of Ultrathin Molybdenum Disulfide (MoS <sub>2</sub> ). Advanced Materials Interfaces, 2019, 6, 1901246.	3.7	26
63	Kinetics of annealing-induced detwinning in chemical vapor deposited nickel. Acta Materialia, 2019, 178, 263-274.	7.9	9
64	Deformation behavior of BCC tantalum nanolayered composites with modulated layer thicknesses. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 761, 138037.	5.6	5
65	Atomistic study of crack-tip plasticity in precipitation hardened monocrystalline aluminum. Modelling and Simulation in Materials Science and Engineering, 2019, 27, 065009.	2.0	1
66	Analysis of the Material Behavior of 3D Printed Laminates Via FFF. Experimental Mechanics, 2019, 59, 871-881.	2.0	45
67	Uncertainty and sensitivity analysis of mechanical and thermal properties computed through Embedded Atom Method potential. Computational Materials Science, 2019, 166, 30-41.	3.0	8
68	Short-range structural origins of serration events in metallic glasses. Journal of Alloys and Compounds, 2019, 787, 840-850.	5.5	6
69	How Silver Grows on the Silicon (001) Surface: A Theoretical and Experimental Investigation. ACS Applied Electronic Materials, 2019, 1, 122-131.	4.3	4
70	Development and implementation of a multi-scale model for matrix micro-cracking prediction in composite structures subjected to low velocity impact. Composites Part B: Engineering, 2019, 168, 140-151.	12.0	20
71	Theoretical Investigation: 2D N-Graphdiyne Nanosheets as Promising Anode Materials for Li/Na Rechargeable Storage Devices. ACS Applied Nano Materials, 2019, 2, 127-135.	5.0	56
72	Catalytic CO <sub>2</sub> reduction by palladium-decorated silicon hydride nanosheets. Nature Catalysis, 2019, 2, 46-54.	34.4	116

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73	Elastomer-like deformation in high-Poisson's-ratio graphene allotropes may allow tensile strengths beyond theoretical cohesive strength limits. Carbon, 2019, 143, 752-761.	10.3	8
74	Molecular adsorption and surface formation reactions of HCl, H <sub>2</sub> and chlorosilanes on Si(100)-c(4×4) with applications for high purity silicon production. Applied Surface Science, 2019, 475, 124-134.	6.1	14
75	Uncertainty analysis and estimation of robust AIREBO parameters for graphene. Carbon, 2019, 142, 300-310.	10.3	43
76	Phosphorene as a Catalyst for Highly Efficient Nonaqueous Li-Air Batteries. ACS Applied Materials & Interfaces, 2019, 11, 499-510.	8.0	27
77	2D Hydrogenated graphene-like borophene as a high capacity anode material for improved Li/Na ion batteries: A first principles study. Materials Today Energy, 2018, 8, 22-28.	4.7	93
78	Development of constitutive material model of 3D printed structure via FDM. Materials Today Communications, 2018, 15, 143-152.	1.9	94
79	Nonlinear fracture toughness measurement and crack propagation resistance of functionalized graphene multilayers. Science Advances, 2018, 4, eaao7202.	10.3	72
80	Ultrahigh Storage and Fast Diffusion of Na and K in Blue Phosphorene Anodes. ACS Applied Materials & Interfaces, 2018, 10, 8630-8639.	8.0	143
81	Borophene hydride: a stiff 2D material with high thermal conductivity and attractive optical and electronic properties. Nanoscale, 2018, 10, 3759-3768.	5.6	109
82	Adsorption and Diffusion of Lithium and Sodium on Defective Rhenium Disulfide: A First Principles Study. ACS Applied Materials & Interfaces, 2018, 10, 5373-5384.	8.0	92
83	Two-dimensional boron as an impressive lithium-sulphur battery cathode material. Energy Storage Materials, 2018, 13, 80-87.	18.0	38
84	Carbon ene-yne graphyne monolayer as an outstanding anode material for Li/Na ion batteries. Applied Materials Today, 2018, 10, 115-121.	4.3	44
85	Highly Efficient Ambient Temperature CO <sub>2</sub> Photomethanation Catalyzed by Nanostructured RuO <sub>2</sub> on Silicon Photonic Crystal Support. Advanced Energy Materials, 2018, 8, 1702277.	19.5	58
86	Solar Fuels: Highly Efficient Ambient Temperature CO <sub>2</sub> Photomethanation Catalyzed by Nanostructured RuO <sub>2</sub> on Silicon Photonic Crystal Support (Adv. Energy Mater. 9/2018). Advanced Energy Materials, 2018, 8, 1870041.	19.5	7
87	Effect of lattice stacking orientation and local thickness variation on the mechanical behavior of few layer graphene oxide. Carbon, 2018, 136, 168-175.	10.3	21
88	Band Engineering of Carbon Nitride Monolayers by N-Type, P-Type, and Isoelectronic Doping for Photocatalytic Applications. ACS Applied Materials & Interfaces, 2018, 10, 11143-11151.	8.0	92
89	Tailoring Surface Frustrated Lewis Pairs of In <sub>2</sub> O <sub>3</sub> (OH) <sub>y</sub> for Gas-Phase Heterogeneous Photocatalytic Reduction of CO <sub>2</sub> by Isomorphous Substitution of In <sup>3+</sup> with Bi <sup>3+</sup> . Advanced Science, 2018, 5, 1700732.	11.2	91
90	Prediction of ply crack evolution and stiffness degradation in multidirectional symmetric laminates under multiaxial stress states. Composites Part B: Engineering, 2018, 133, 53-67.	12.0	37

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91	Assessing progressive failure in long wind turbine blades under quasi-static and cyclic loads. <i>Renewable Energy</i> , 2018, 119, 754-766.	8.9	29
92	Adsorption and diffusion of lithium polysulfides over blue phosphorene for Li-ion batteries. <i>Nanoscale</i> , 2018, 10, 21335-21352.	5.6	69
93	Enhanced photothermal reduction of gaseous CO <sub>2</sub> over silicon photonic crystal supported ruthenium at ambient temperature. <i>Energy and Environmental Science</i> , 2018, 11, 3443-3451.	30.8	83
94	Identification of Tetramers in Silver Films Grown on the Si(001) Surface at Room Temperature. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6275-6279.	4.6	5
95	Time-dependent damage analysis for viscoelastic-viscoplastic structural laminates under biaxial loading. <i>Composite Structures</i> , 2018, 203, 60-70.	5.8	5
96	Solar Fuels: Tailoring Surface Frustrated Lewis Pairs of In <sub>2</sub> O <sub>3</sub> ·x(OH) <sub>y</sub> for Gas-Phase Heterogeneous Photocatalytic Reduction of CO <sub>2</sub> by Isomorphous Substitution of In <sup>3+</sup> with Bi <sup>3+</sup> (Adv. Sci. 6/2018). <i>Advanced Science</i> , 2018, 5, 1870034.	11.2	3
97	2.7 Micromechanics of Damage Evolution in Laminates. , 2018, , 118-147.		0
98	First Principles Investigation of HCl, H <sub>2</sub> , and Chlorosilane Adsorption on Cu <sub>3</sub> Si Surfaces with Applications for Polysilicon Production. <i>Journal of Physical Chemistry C</i> , 2018, 122, 20252-20260.	3.1	9
99	Hydrogen storage in Li, Na and Ca decorated and defective borophene: a first principles study. <i>RSC Advances</i> , 2018, 8, 20748-20757.	3.6	64
100	The ideal strength of two-dimensional stanene may reach or exceed the Griffith strength estimate. <i>Nanoscale</i> , 2017, 9, 7055-7062.	5.6	29
101	Consequences of Surface Oxophilicity of Ni, Ni-Co, and Co Clusters on Methane Activation. <i>Journal of the American Chemical Society</i> , 2017, 139, 6928-6945.	13.7	104
102	Solar grade silicon production: A review of kinetic, thermodynamic and fluid dynamics based continuum scale modeling. <i>Renewable and Sustainable Energy Reviews</i> , 2017, 78, 1288-1314.	16.4	40
103	A fast mollified impulse method for biomolecular atomistic simulations. <i>Journal of Computational Physics</i> , 2017, 333, 180-198.	3.8	0
104	Atomistic Origins of Ductility Enhancement in Metal Oxide Coated Silicon Nanowires for Li-ion Battery Anodes. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700920.	3.7	23
105	Effect of matrix cracks and delamination on extension-twist coupling of thin pretwisted composite strips. <i>Composite Structures</i> , 2017, 180, 234-250.	5.8	4
106	Role of graphene in enhancing the mechanical properties of TiO <sub>2</sub> /graphene heterostructures. <i>Nanoscale</i> , 2017, 9, 11678-11684.	5.6	22
107	Adsorption of Metallic, Metalloidal, and Nonmetallic Adatoms on Two-Dimensional C <sub>3</sub> N. <i>Journal of Physical Chemistry C</i> , 2017, 121, 18575-18583.	3.1	111
108	A first principles study of hydrogen storage in lithium decorated defective phosphorene. <i>International Journal of Hydrogen Energy</i> , 2017, 42, 23018-23027.	7.1	56

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109	Photothermal Catalyst Engineering: Hydrogenation of Gaseous CO <sub>2</sub> with High Activity and Tailored Selectivity. <i>Advanced Science</i> , 2017, 4, 1700252.	11.2	97
110	Molecular Dynamics Investigation on Coke Ash Behavior in the High-Temperature Zones of a Blast Furnace: Influence of Alkalis. <i>Energy &amp; Fuels</i> , 2017, 31, 13466-13474.	5.1	17
111	Photothermal Catalysis: Photothermal Catalyst Engineering: Hydrogenation of Gaseous CO <sub>2</sub> with High Activity and Tailored Selectivity ( <i>Adv. Sci.</i> 10/2017). <i>Advanced Science</i> , 2017, 4, .	11.2	2
112	Phosphorene as a Polysulfide Immobilizer and Catalyst in High-Performance Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2017, 29, 1602734.	21.0	289
113	A molecular dynamic simulation on the factors influencing the fluidity of molten coke ash during alkalization with K <sub>2</sub> O and Na <sub>2</sub> O. <i>Chemical Engineering Journal</i> , 2017, 313, 1184-1193.	12.7	44
114	Self-Trapped Charge Carriers in Defected Amorphous TiO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2016, 120, 27910-27916.	3.1	17
115	Carrier dynamics and the role of surface defects: Designing a photocatalyst for gas-phase CO <sub>2</sub> reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E8011-E8020.	7.1	89
116	Vertically Oriented Arrays of ReS <sub>2</sub> Nanosheets for Electrochemical Energy Storage and Electrocatalysis. <i>Nano Letters</i> , 2016, 16, 3780-3787.	9.1	241
117	Role of niobium and oxygen concentration on glass forming ability and crystallization behavior of Zr-Ni-Al-Cu-Nb bulk metallic glasses with low copper concentration. <i>Journal of Non-Crystalline Solids</i> , 2016, 445-446, 88-94.	3.1	13
118	Mechanical properties of monolayer penta-graphene and phagraphene: a first-principles study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 26736-26742.	2.8	106
119	New insights into the structure-nonlinear mechanical property relations for graphene allotropes. <i>Carbon</i> , 2016, 110, 443-457.	10.3	32
120	Surface Analogues of Molecular Frustrated Lewis Pairs in Heterogeneous CO <sub>2</sub> Hydrogenation Catalysis. <i>ACS Catalysis</i> , 2016, 6, 5764-5770.	11.2	80
121	Metadynamics-Biased ab Initio Molecular Dynamics Study of Heterogeneous CO <sub>2</sub> Reduction via Surface Frustrated Lewis Pairs. <i>ACS Catalysis</i> , 2016, 6, 7109-7117.	11.2	78
122	Heterogeneous reduction of carbon dioxide by hydride-terminated silicon nanocrystals. <i>Nature Communications</i> , 2016, 7, 12553.	12.8	93
123	Development of a physics-based multi-scale progressive damage model for assessing the durability of wind turbine blades. <i>Composite Structures</i> , 2016, 141, 50-62.	5.8	46
124	Photoexcited Surface Frustrated Lewis Pairs for Heterogeneous Photocatalytic CO <sub>2</sub> Reduction. <i>Journal of the American Chemical Society</i> , 2016, 138, 1206-1214.	13.7	210
125	Harnessing atomistic simulations to predict the rate at which dislocations overcome obstacles. <i>Journal of the Mechanics and Physics of Solids</i> , 2016, 90, 203-214.	4.8	36
126	Interfacial Shear Strength of Multilayer Graphene Oxide Films. <i>ACS Nano</i> , 2016, 10, 1939-1947.	14.6	64



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127	Competing twinning mechanisms in body-centered cubic metallic nanowires. Scripta Materialia, 2016, 113, 214-217.	5.2	37
128	Critical stiffness damage envelopes for multidirectional laminated structures under multiaxial loading conditions. Materials and Design, 2016, 91, 218-229.	7.0	13
129	Development of a synergistic damage mechanics model to predict evolution of ply cracking and stiffness changes in multidirectional composite laminates under creep. International Journal of Damage Mechanics, 2016, 25, 1060-1078.	4.2	8
130	Deformation behavior of a NiCo multilayer with a modulated grain size distribution. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 641, 305-314.	5.6	13
131	A Practical Investigation of the Production of Zr-Cu-Al-Ni Bulk Metallic Glasses by Arc Melting and Suction Casting. Materials Transactions, 2015, 56, 1834-1841.	1.2	2
132	Investigating the atomic level influencing factors of glass forming ability in NiAl and CuZr metallic glasses. Journal of Chemical Physics, 2015, 143, 114509.	3.0	9
133	Failure mechanisms in thin-walled nanocrystalline cylinders under uniaxial compression. Acta Materialia, 2015, 86, 157-168.	7.9	0
134	A synergistic damage mechanics based multiscale model for composite laminates subjected to multiaxial strains. Mechanics of Materials, 2015, 83, 72-89.	3.2	42
135	Predicting evolution of ply cracks in composite laminates subjected to Biaxial loading. Composites Part B: Engineering, 2015, 75, 264-273.	12.0	48
136	Illuminating CO <sub>2</sub> reduction on frustrated Lewis pair surfaces: investigating the role of surface hydroxides and oxygen vacancies on nanocrystalline In <sub>2</sub> O <sub>3</sub> (OH) <sub>y</sub> . Physical Chemistry Chemical Physics, 2015, 17, 14623-14635.	2.8	186
137	Adsorption and Dissociation of H <sub>2</sub> O on Monolayered MoS <sub>2</sub> Edges: Energetics and Mechanism from <i>ab Initio</i> Simulations. Journal of Physical Chemistry C, 2015, 119, 6518-6529.	3.1	107
138	A first principles study of hydrogen storage on lithium decorated two dimensional carbon allotropes. International Journal of Hydrogen Energy, 2015, 40, 6128-6136.	7.1	53
139	A Foldable Lithium-Sulfur Battery. ACS Nano, 2015, 9, 11342-11350.	14.6	125
140	Strengthening in Graphene Oxide Nanosheets: Bridging the Gap between Interplanar and Intraplanar Fracture. Nano Letters, 2015, 15, 6528-6534.	9.1	61
141	Effects of topological point reconstructions on the fracture strength and deformation mechanisms of graphene. Computational Materials Science, 2015, 97, 172-180.	3.0	23
142	High strength measurement of monolayer graphene oxide. Carbon, 2015, 81, 497-504.	10.3	138
143	Development of a Synergistic Damage Mechanics-Based Model for Predicting Multiaxial Effects in Progressive Failure of Composite Structures. , 2014, , .		0
144	A van der Waals density functional theory comparison of metal decorated graphene systems for hydrogen adsorption. Journal of Applied Physics, 2014, 115, 224301.	2.5	35

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145	A kinematic study of energy barriers for crack formation in graphene tilt boundaries. Journal of Applied Physics, 2014, 115, .	2.5	19
146	Defect engineering of graphene for effective hydrogen storage. International Journal of Hydrogen Energy, 2014, 39, 4981-4995.	7.1	96
147	Progressive Failure Analysis of Polymer Composites Using a Synergistic Damage Mechanics Methodology. , 2014, , 147-155.		2
148	An Atomistic-Based Hierarchical Multiscale Examination of Age Hardening in an Al-Cu Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 2625-2644.	2.2	34
149	A DFT study of (Rh, Nb)-codoped rutile TiO <sub>2</sub> . Journal of Physics Condensed Matter, 2013, 25, 085501.	1.8	23
150	Effect of doping on electronic structure and photocatalytic behavior of amorphous TiO <sub>2</sub> . Journal of Physics Condensed Matter, 2013, 25, 475501.	1.8	30
151	A synergistic damage mechanics approach to mechanical response of composite laminates with ply cracks. Journal of Composite Materials, 2013, 47, 2475-2501.	2.4	38
152	Amorphous TiO <sub>2</sub> as a Photocatalyst for Hydrogen Production: A DFT Study of Structural and Electronic Properties. Energy Procedia, 2012, 29, 291-299.	1.8	108
153	Atomistic simulations of dislocation-precipitate interactions emphasize importance of cross-slip. Scripta Materialia, 2011, 64, 398-401.	5.2	58
154	Mechanisms of Guinier-Preston zone hardening in the athermal limit. Acta Materialia, 2010, 58, 5797-5805.	7.9	81
155	Evolution of ply cracks in multidirectional composite laminates. International Journal of Solids and Structures, 2010, 47, 1338-1349.	2.7	86
156	A synergistic damage mechanics approach for composite laminates with matrix cracks in multiple orientations. Mechanics of Materials, 2009, 41, 954-968.	3.2	85
157	A representative volume element based on translational symmetries for FE analysis of cracked laminates with two arrays of cracks. International Journal of Solids and Structures, 2009, 46, 1793-1804.	2.7	56
158	Analysis of multiple off-axis ply cracks in composite laminates. International Journal of Solids and Structures, 2008, 45, 4574-4589.	2.7	61
159	Multiscale Modeling for Damage Analysis. , 2008, , 529-578.		4
160	Damage Mechanics of Composite Laminates with Transverse Matrix Cracks in Multiple Orientations. , 2007, , .		2
161	Macro-damage mechanics. , 0, , 134-178.		0
162	Damage progression. , 0, , 179-236.		0