Sungwook Hong

List of Publications by Year in descending order

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28 papers

2,080 citations

687363 13 h-index 26 g-index

28 all docs 28 docs citations

times ranked

28

2441 citing authors

#	Article	IF	Citations
1	The ReaxFF reactive force-field: development, applications and future directions. Npj Computational Materials, 2016, 2, .	8.7	1,319
2	Molecular Dynamics Simulations of the Oxidation of Aluminum Nanoparticles using the ReaxFF Reactive Force Field. Journal of Physical Chemistry C, 2015, 119, 17876-17886.	3.1	141
3	Atomistic-Scale Analysis of Carbon Coating and Its Effect on the Oxidation of Aluminum Nanoparticles by ReaxFF-Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2016, 120, 9464-9474.	3.1	116
4	Energetic Performance of Optically Activated Aluminum/Graphene Oxide Composites. ACS Nano, 2018, 12, 11366-11375.	14.6	99
5	Computational Synthesis of MoS ₂ Layers by Reactive Molecular Dynamics Simulations: Initial Sulfidation of MoO ₃ Surfaces. Nano Letters, 2017, 17, 4866-4872.	9.1	60
6	Enhancing combustion performance of nano-Al/PVDF composites with \hat{I}^2 -PVDF. Combustion and Flame, 2020, 219, 467-477.	5.2	55
7	Synergistically Chemical and Thermal Coupling between Graphene Oxide and Graphene Fluoride for Enhancing Aluminum Combustion. ACS Applied Materials & Samp; Interfaces, 2020, 12, 7451-7458.	8.0	52
8	Chemical Vapor Deposition Synthesis of MoS ₂ Layers from the Direct Sulfidation of MoO ₃ Surfaces Using Reactive Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2018, 122, 7494-7503.	3.1	41
9	Multiobjective genetic training and uncertainty quantification of reactive force fields. Npj Computational Materials, 2018, 4, .	8.7	25
10	Defect Healing in Layered Materials: A Machine Learning-Assisted Characterization of MoS ₂ Crystal Phases. Journal of Physical Chemistry Letters, 2019, 10, 2739-2744.	4.6	19
11	Growth Kinetics and Atomistic Mechanisms of Native Oxidation of ZrS _{<i>x</i>} Se _{2–<i>x</i>} and MoS ₂ Crystals. Nano Letters, 2020, 20, 8592-8599.	9.1	16
12	Functionalized graphene sheet as a dispersible fuel additive for catalytic decomposition of methylcyclohexane. Combustion and Flame, 2020, 217, 212-221.	5 . 2	16
13	Computational characterization of thermal and mechanical properties of single and bilayer germanene nanoribbon. Computational Materials Science, 2021, 190, 110272.	3.0	16
14	Defect Design of Two-Dimensional MoS ₂ Structures by Using a Graphene Layer and Potato Stamp Concept. Journal of Physical Chemistry C, 2018, 122, 11911-11917.	3.1	13
15	Sulfurization of MoO ₃ in the Chemical Vapor Deposition Synthesis of MoS ₂ Enhanced by an H ₂ S/H ₂ Mixture. Journal of Physical Chemistry Letters, 2021, 12, 1997-2003.	4.6	13
16	Characterization of the mechanical properties of van der Waals heterostructures of stanene adsorbed on graphene, hexagonal boron–nitride and silicon carbide. Physical Chemistry Chemical Physics, 2021, 23, 5244-5253.	2.8	12
17	High temperature oxidation of monolayer MoS2 and its effect on mechanical properties: A ReaxFF molecular dynamics study. Surfaces and Interfaces, 2021, 26, 101371.	3.0	12
18	Role of H Transfer in the Gas-Phase Sulfidation Process of MoO ₃ : A Quantum Molecular Dynamics Study. Journal of Physical Chemistry Letters, 2018, 9, 6517-6523.	4.6	10

#	Article	IF	CITATIONS
19	Reactivity of Sulfur Molecules on MoO ₃ (010) Surface. Journal of Physical Chemistry Letters, 2017, 8, 6206-6210.	4.6	9
20	Enhanced Fuel Decomposition in the Presence of Colloidal Functionalized Graphene Sheet-Supported Platinum Nanoparticles. ACS Applied Energy Materials, 2020, 3, 7637-7648.	5.1	8
21	EZFF: Python library for multi-objective parameterization and uncertainty quantification of interatomic forcefields for molecular dynamics. SoftwareX, 2021, 13, 100663.	2.6	6
22	Tensile strength and fracture mechanics of two-dimensional nanocrystalline silicon carbide. Computational Materials Science, 2021, 197, 110580.	3.0	6
23	Nature of creep deformation in nanocrystalline cupronickel alloy: A Molecular Dynamics study. Results in Materials, 2021, 10, 100191.	1.8	5
24	Reactive molecular dynamics simulations and machine learning. Journal of Physics: Conference Series, 2020, 1461, 012182.	0.4	4
25	A Reactive Molecular Dynamics Study of Atomistic Mechanisms During Synthesis of MoS2 Layers by Chemical Vapor Deposition. MRS Advances, 2018, 3, 307-311.	0.9	3
26	Unveiling oxidation mechanism of bulk ZrS2. MRS Advances, 2021, 6, 303-306.	0.9	3
27	Quantum molecular dynamics simulations of chemical vapor deposition synthesis of MoS2 crystal assisted by H2 partial pressures. , 2020, , .		1
28	Atomic-level investigation on the oxidation efficiency and corrosion resistance of lithium enhanced by the addition of two dimensional materials. RSC Advances, 2022, 12, 5458-5465.	3.6	0