

Xi Chen

List of Publications by Year in descending order

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453
papers

15,883
citations

20036

63
h-index

34195

103
g-index

456
all docs

456
docs citations

456
times ranked

15223
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Learn from nature: Bio-inspired structure design for lithium-ion batteries. <i>EcoMat</i> , 2022, 4, . | 6.8 | 8 |
| 2 | CO ₂ reduction on single-atom Ir catalysts with chemical functionalization. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 3733-3740. | 1.3 | 3 |
| 3 | Reversible Mechanochromisms via Manipulating Surface Wrinkling. <i>Nano Letters</i> , 2022, 22, 2261-2269. | 4.5 | 25 |
| 4 | Ni-Fe bimetallic hexaaluminate for efficient reduction of O ₂ -containing CO ₂ via chemical looping. <i>Chemical Engineering Journal</i> , 2022, 441, 136071. | 6.6 | 11 |
| 5 | Flexible Piezoionic Strain Sensors toward Artificial Intelligence Applications. <i>Synlett</i> , 2022, 33, 1486-1491. | 1.0 | 3 |
| 6 | Development of sorbent materials for direct air capture of CO ₂ . <i>MRS Bulletin</i> , 2022, 47, 405-415. | 1.7 | 15 |
| 7 | The method of introducing oxygen vacancy into La _{0.8} Sr _{0.2} FeO ₃ -based catalyst: enhancing the ORR and OER performance. <i>Journal of Materials Science</i> , 2022, 57, 12364-12376. | 1.7 | 3 |
| 8 | Superior CO ₂ uptake and enhanced compressive strength for carbonation curing of cement-based materials via flue gas. <i>Construction and Building Materials</i> , 2022, 346, 128364. | 3.2 | 10 |
| 9 | Piezoionic strain sensors enabled by force-voltage coupling from ionogels. <i>Chemical Physics Letters</i> , 2022, 803, 139872. | 1.2 | 3 |
| 10 | Study on the mechanism of catalytic synthesis of dimethyldichlorosilane by AlCl ₃ /MIL-53(Al)@ γ -Al ₂ O ₃ . <i>Applied Organometallic Chemistry</i> , 2021, 35, . | 1.7 | 8 |
| 11 | Recent progress in energy storage and conversion of flexible symmetric transducers. <i>Journal of Materials Chemistry A</i> , 2021, 9, 753-781. | 5.2 | 17 |
| 12 | Molecular dynamics investigation on the composition separation of binary organic mixture in a double-walled T-shaped carbon nanotube separator. <i>Journal of Molecular Liquids</i> , 2021, 321, 114498. | 2.3 | 1 |
| 13 | Strong bases behave as weak bases in nanoscale chemical environments: implication in humidity-swing CO ₂ air capture. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 14811-14817. | 1.3 | 7 |
| 14 | Simple pyrolysis of polystyrene into valuable chemicals. <i>E-Polymers</i> , 2021, 21, 428-432. | 1.3 | 17 |
| 15 | MOFs/PVA hybrid membranes with enhanced mechanical and ion-conductive properties. <i>E-Polymers</i> , 2021, 21, 160-165. | 1.3 | 9 |
| 16 | Fractal-inspired soft deployable structure: a theoretical study. <i>Soft Matter</i> , 2021, 17, 4834-4841. | 1.2 | 3 |
| 17 | Nanomaterials for adsorption and conversion of CO ₂ under gentle conditions. <i>Materials Today</i> , 2021, 50, 385-399. | 8.3 | 21 |
| 18 | Post-wrinkling behaviors of a bilayer on a soft substrate. <i>International Journal of Solids and Structures</i> , 2021, 214-215, 74-79. | 1.3 | 6 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Bismuth Oxychloride Nanowires for Photocatalytic Decomposition of Organic Dyes. ACS Applied Nano Materials, 2021, 4, 3887-3892. | 2.4 | 21 |
| 20 | Bioinspired, Treeâ€œRootâ€œLike Interfacial Designs for Structural Batteries with Enhanced Mechanical Properties. Advanced Energy Materials, 2021, 11, 2100997. | 10.2 | 27 |
| 21 | Silver decorated graphene nanocomposites toward electrochemical energy storage. Chemical Physics Letters, 2021, 771, 138534. | 1.2 | 6 |
| 22 | Curvature-controlled delamination patterns of thin films on spherical substrates. IScience, 2021, 24, 102616. | 1.9 | 1 |
| 23 | Highly Sensitive Ultrastable Electrochemical Sensor Enabled by Proton-Coupled Electron Transfer. Nano Letters, 2021, 21, 5369-5376. | 4.5 | 19 |
| 24 | Flexible Resistance-Type Strain Sensors toward Monitoring Finger Movements. Synlett, 2021, 32, 1939-1942. | 1.0 | 2 |
| 25 | Capture of ambient air CO ₂ from municipal wastewater mineralization by using an ion-exchange membrane. Science of the Total Environment, 2021, 790, 148136. | 3.9 | 5 |
| 26 | On the snake-like lateral un-dulatory locomotion in terrestrial, aquatic and sand environments. Journal of the Mechanics and Physics of Solids, 2021, 157, 104629. | 2.3 | 3 |
| 27 | Flexible Composite Solid Electrolyte with an Active Inorganic Filler. ACS Sustainable Chemistry and Engineering, 2021, 9, 2237-2245. | 3.2 | 13 |
| 28 | Photocatalytic reduction of CO ₂ by halide perovskites: recent advances and future perspectives. Materials Advances, 2021, 2, 7187-7209. | 2.6 | 27 |
| 29 | Screening and Understanding Li Adsorption on Two-Dimensional Metallic Materials by Learning Physics and Physics-Simplified Learning. JACS Au, 2021, 1, 1904-1914. | 3.6 | 12 |
| 30 | CO ₂ removal from natural gas by moisture swing adsorption. Chemical Engineering Research and Design, 2021, 176, 162-168. | 2.7 | 11 |
| 31 | Nanostructure Engineering of Graphitic Carbon Nitride for Electrochemical Applications. ACS Nano, 2021, 15, 18777-18793. | 7.3 | 61 |
| 32 | A PVA/LiCl/PEO interpenetrating composite electrolyte with a three-dimensional dual-network for all-solid-state flexible aluminumâ€œair batteries. RSC Advances, 2021, 11, 39476-39483. | 1.7 | 10 |
| 33 | Effects of low-temperature plasma treatment on wettability of glass surface: Molecular dynamic simulation and experimental study. Applied Surface Science, 2020, 503, 144257. | 3.1 | 29 |
| 34 | Sorbenten zur direkten Gewinnung von CO ₂ aus der Umgebungsluft. Angewandte Chemie, 2020, 132, 7048-7072. | 1.6 | 18 |
| 35 | Sorbents for the Direct Capture of CO ₂ from Ambient Air. Angewandte Chemie - International Edition, 2020, 59, 6984-7006. | 7.2 | 341 |
| 36 | Engineering interfacial adhesion for high-performance lithium metal anode. Nano Energy, 2020, 67, 104242. | 8.2 | 34 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Comment on "Accelerated Discovery of New 8-Electron Half-Heusler Compounds as Promising Energy and Topological Quantum Materials", Journal of Physical Chemistry C, 2020, 124, 2247-2249. | 1.5 | 13 |
| 38 | Sea-island nanostructured polyvinylidene fluoride/zeolitic imidazolate framework-8 polyelectrolyte for high-performance all-solid-state supercapacitors. Journal of Power Sources, 2020, 448, 227587. | 4.0 | 23 |
| 39 | Interface characterization and scratch resistance of plasma sprayed TiO ₂ -CNTs nanocomposite coating. Journal of Alloys and Compounds, 2020, 819, 153009. | 2.8 | 18 |
| 40 | Interaction between mechanosensitive channels embedded in lipid membrane. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103543. | 1.5 | 2 |
| 41 | Nacre-Inspired Composite Electrolytes for Load-Bearing Solid-State Lithium-Metal Batteries. Advanced Materials, 2020, 32, e1905517. | 11.1 | 100 |
| 42 | Latest Advances in Flexible Symmetric Supercapacitors: From Material Engineering to Wearable Applications. Accounts of Chemical Research, 2020, 53, 1468-1477. | 7.6 | 72 |
| 43 | Filtration performance of the granular bed filter used for industrial flue gas purification: A review of simulation and experiment. Separation and Purification Technology, 2020, 251, 117318. | 3.9 | 26 |
| 44 | How interlayer twist angles affect thermal conduction of double-walled nanotubes: A non-equilibrium molecular dynamics study. International Journal of Heat and Mass Transfer, 2020, 160, 120234. | 2.5 | 5 |
| 45 | Moisture-Driven CO ₂ Sorbents. Joule, 2020, 4, 1823-1837. | 11.7 | 65 |
| 46 | Carbon nanotubes/graphitic carbon nitride nanocomposites for all-solid-state supercapacitors. Science China Technological Sciences, 2020, 63, 1714-1720. | 2.0 | 14 |
| 47 | MnO ₂ Synergized with N/S Codoped Graphene as a Flexible Cathode Efficient Electrocatalyst for Advanced Honeycomb-Shaped Stretchable Aluminum-Air Batteries. Langmuir, 2020, 36, 12954-12962. | 1.6 | 14 |
| 48 | Highly efficient reduction of O ₂ -containing CO ₂ via chemical looping based on perovskite nanocomposites. Nano Energy, 2020, 78, 105320. | 8.2 | 32 |
| 49 | CO ₂ Absorption over Ion Exchange Resins: The Effect of Amine Functional Groups and Microporous Structures. Industrial & Engineering Chemistry Research, 2020, 59, 16507-16515. | 1.8 | 25 |
| 50 | Development of Adhesion Durability Evaluation of Surface Coatings Using Repeated Laser Shock-wave Adhesion Test. Journal of Nondestructive Evaluation, 2020, 39, 1. | 1.1 | 2 |
| 51 | A carbon-doped anatase TiO ₂ -Based flexible silicon anode with high-performance and stability for flexible lithium-ion battery. Journal of Power Sources, 2020, 466, 228339. | 4.0 | 29 |
| 52 | Separation of binary organic mixture in T-shaped carbon nanotube separator: Insights from molecular dynamics simulation. Journal of Molecular Liquids, 2020, 312, 113371. | 2.3 | 7 |
| 53 | Monodispersed LiFePO ₄ @C Core-Shell Nanoparticles Anchored on 3D Carbon Cloth for High-Rate Performance Binder-Free Lithium Ion Battery Cathode. Journal of Nanomaterials, 2020, 2020, 1-11. | 1.5 | 4 |
| 54 | Understanding transport and separation of organic mixed working fluids in T-junction from multi-scale insights: Literature review and case study. International Journal of Heat and Mass Transfer, 2020, 154, 119702. | 2.5 | 12 |

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|----|--|------|-----------|
| 55 | Measurements of fracture properties of MWCNTs modified LiNi _{0.5} Mn _{0.3} Co _{0.2} O ₂ electrodes by a modified shear lag model. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2020, 781, 139223. | 2.6 | 2 |
| 56 | Single-Atom Catalytic Materials for Advanced Battery Systems. <i>Advanced Materials</i> , 2020, 32, e1906548. | 11.1 | 156 |
| 57 | Rapid and continuous regulating adhesion strength by mechanical micro-vibration. <i>Nature Communications</i> , 2020, 11, 1583. | 5.8 | 23 |
| 58 | Single-atom Catalytic Materials for Lean-electrolyte Ultrastable Lithium-Sulfur Batteries. <i>Nano Letters</i> , 2020, 20, 5522-5530. | 4.5 | 111 |
| 59 | Hydrothermal Synthesis of Nanomaterials. <i>Journal of Nanomaterials</i> , 2020, 2020, 1-3. | 1.5 | 249 |
| 60 | Flexible and Electroactive Ionogel Graphene Composite Actuator. <i>Materials</i> , 2020, 13, 656. | 1.3 | 16 |
| 61 | A Nano-shield Design for Separators to Resist Dendrite Formation in Lithium-Metal Batteries. <i>Angewandte Chemie</i> , 2020, 132, 6623-6628. | 1.6 | 14 |
| 62 | Two-step synthesis of millimeter-scale flexible tubular supercapacitors. <i>Communications Chemistry</i> , 2020, 3, . | 2.0 | 13 |
| 63 | All-Temperature Flexible Supercapacitors Enabled by Antifreezing and Thermally Stable Hydrogel Electrolyte. <i>Nano Letters</i> , 2020, 20, 1907-1914. | 4.5 | 232 |
| 64 | A Nano-shield Design for Separators to Resist Dendrite Formation in Lithium-Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6561-6566. | 7.2 | 128 |
| 65 | High-performance silicon nanocomposite based ionic actuators. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9228-9238. | 5.2 | 16 |
| 66 | Surface buckling delamination patterns of film on soft spherical substrates. <i>Soft Matter</i> , 2020, 16, 3952-3961. | 1.2 | 4 |
| 67 | Flexible and ion-conductive ionogel towards energy storage application. <i>Chemical Physics Letters</i> , 2020, 755, 137814. | 1.2 | 4 |
| 68 | Porous Perovskite towards Oxygen Reduction Reaction in Flexible Aluminum-Air Battery. <i>Acta Chimica Sinica</i> , 2020, 78, 557. | 0.5 | 3 |
| 69 | Examination of Prestressed Coating/Substrate Systems Using Spherical Indentation-Determination of Film Prestress, Film Modulus, and Substrate Modulus. <i>Journal of Engineering Materials and Technology</i> , <i>Transactions of the ASME</i> , 2020, 142, . | 0.8 | 0 |
| 70 | Strain-Guided Oxidative Nanoperforation on Graphene. <i>Small</i> , 2019, 15, e1903213. | 5.2 | 5 |
| 71 | On the surface hydrophilization of a blended polysulfone membrane: atomic force microscopy measurement and molecular dynamics simulation. <i>Surface Topography: Metrology and Properties</i> , 2019, 7, 035003. | 0.9 | 6 |
| 72 | An interfacial polymerization strategy towards high-performance flexible supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20158-20161. | 5.2 | 24 |

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|----|--|-----|-----------|
| 73 | Moisture Swing Ion-Exchange Resin-PO ₄ Sorbent for Reversible CO ₂ Capture from Ambient Air. Energy & Fuels, 2019, 33, 6562-6567. | 2.5 | 24 |
| 74 | Preparation of Three-Layer Graphene Sheets from Asphaltenes Using a Montmorillonite Template. Journal of Nanomaterials, 2019, 2019, 1-6. | 1.5 | 7 |
| 75 | Electrospun Polyaniline Nanofiber Networks toward High-Performance Flexible Supercapacitors. Advanced Materials Technologies, 2019, 4, 1900564. | 3.0 | 39 |
| 76 | Effect of Local Terrace on Structure and Mechanics of Graphene Grain Boundary. Journal of Physical Chemistry C, 2019, 123, 28460-28468. | 1.5 | 4 |
| 77 | Strengthening effect of rhenium on different substitution positions of tungsten nanofilm at high temperature: DFT and molecular dynamics simulation. Materials Research Express, 2019, 6, 115013. | 0.8 | 0 |
| 78 | Vibration-to-Electric Energy Conversion via Electric Double Layer Redistribution of Graphene-Nickel Foam Electrode. Journal of the Electrochemical Society, 2019, 166, A3280-A3286. | 1.3 | 1 |
| 79 | Degradation of tetracycline by peroxymonosulfate activated with zero-valent iron: Performance, intermediates, toxicity and mechanism. Chemical Engineering Journal, 2019, 364, 45-56. | 6.6 | 466 |
| 80 | Designing Flexible Lithium-Ion Batteries by Structural Engineering. ACS Energy Letters, 2019, 4, 690-701. | 8.8 | 175 |
| 81 | Three-dimensional auxetic properties in group Vâ€“VI binary monolayer crystals X ₃ M ₂ (X = S, Se; M = N, P, As). Physical Chemistry Chemical Physics, 2019, 21, 5916-5924. | 1.3 | 10 |
| 82 | Harvesting Low-Grade Heat via Thermal-Induced Electric Double Layer Redistribution of Nanoporous Graphene Films. Langmuir, 2019, 35, 7713-7719. | 1.6 | 10 |
| 83 | <i>In situ</i> synthesized PEO/NBR composite ionogels for high-performance all-solid-state supercapacitors. Chemical Communications, 2019, 55, 8470-8473. | 2.2 | 17 |
| 84 | Buckling morphology of an elastic ring confined in an annular channel. Soft Matter, 2019, 15, 5443-5448. | 1.2 | 6 |
| 85 | Ultra-Thin Conductive Graphitic Carbon Nitride Assembly through van der Waals Epitaxy toward High-Energy-Density Flexible Supercapacitors. Nano Letters, 2019, 19, 4103-4111. | 4.5 | 80 |
| 86 | Mechanical modeling of pimple growth. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 95, 191-195. | 1.5 | 1 |
| 87 | Effects of technology parameters on stress in silicon-graphite based multilayer electrodes for lithium ion batteries. Journal Physics D: Applied Physics, 2019, 52, 345501. | 1.3 | 4 |
| 88 | Elementary Slender Soft Robots Inspired by Skeleton Joint System of Animals. Soft Robotics, 2019, 6, 377-388. | 4.6 | 10 |
| 89 | Effects of cycle times and C-rate on mechanical properties of copper foil and adhesive strength of electrodes in commercial LiCoO ₂ LIBs. Engineering Failure Analysis, 2019, 101, 193-205. | 1.8 | 22 |
| 90 | In-operando deformation studies on the mechano-electrochemical mechanism in free-standing MWCNTs/V ₂ O ₅ lithium ion battery electrode. Electrochimica Acta, 2019, 305, 101-115. | 2.6 | 24 |

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| 91 | Molecular Dynamics-Decorated Finite Element Method (MDeFEM): Application to the Gating Mechanism of Mechanosensitive Channels. , 2019, , 77-128. | | 0 |
| 92 | Correlation between the infiltration behaviors and nanoporous structures of silica gel/liquid energy absorption system. Journal of Applied Physics, 2019, 125, 065106. | 1.1 | 3 |
| 93 | Porous g-C ₃ N ₄ covered MOF-derived nanocarbon materials for high-performance supercapacitors. RSC Advances, 2019, 9, 39076-39081. | 1.7 | 14 |
| 94 | Reversible SO ₂ Removal from Simulated Flue Gas by Ion Exchange Membranes Using the Humidity-Swing. Energy & Fuels, 2019, 33, 10953-10958. | 2.5 | 3 |
| 95 | Synergistic effect of supercritical CO ₂ and organic solvent on exfoliation of graphene: experiment and atomistic simulation studies. Physical Chemistry Chemical Physics, 2019, 21, 22149-22157. | 1.3 | 13 |
| 96 | Gating and inactivation of mechanosensitive channels of small conductance: A continuum mechanics study. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 90, 502-514. | 1.5 | 2 |
| 97 | In situ strain measurements and stress analysis of SiO@C composite electrodes during electrochemical cycling by using digital image correlation. Solid State Ionics, 2019, 331, 56-65. | 1.3 | 21 |
| 98 | Rapid Programmable Nanodroplet Motion on a Strain-Gradient Surface. Langmuir, 2019, 35, 2865-2870. | 1.6 | 19 |
| 99 | Three dimensional buckling beam under cylindrical constraint. International Journal of Mechanical Sciences, 2019, 150, 348-355. | 3.6 | 11 |
| 100 | Porous insulating matrix for lithium metal anode with long cycling stability and high power. Energy Storage Materials, 2019, 17, 31-37. | 9.5 | 36 |
| 101 | High Energy Density Foldable Battery Enabled by Zigzag Like Design. Advanced Energy Materials, 2019, 9, 1802998. | 10.2 | 53 |
| 102 | Accordion-like stretchable Li-ion batteries with high energy density. Energy Storage Materials, 2019, 17, 136-142. | 9.5 | 57 |
| 103 | Mechanisms of electromechanical wrinkling for highly stretched substrate-free dielectric elastic membrane. Journal of the Mechanics and Physics of Solids, 2019, 122, 520-537. | 2.3 | 21 |
| 104 | Indentation Fatigue Mechanics. , 2019, , 401-431. | | 0 |
| 105 | Helical Buckling Behaviors of the Nanowire/Substrate System. , 2019, , 241-287. | | 0 |
| 106 | Uniqueness of Elastoplastic Properties Measured by Instrumented Indentation. , 2019, , 211-240. | | 1 |
| 107 | Spherical Indentation on a Prestressed Elastic Coating/Substrate System. , 2019, , 129-152. | | 0 |
| 108 | Hydrogen Embrittlement Cracking Produced by Indentation Test. , 2019, , 289-313. | | 0 |

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|-----|---|------|-----------|
| 109 | Effects of Temperature and Strain Rate on Mechanical Behaviors of Stone-Island Defective Monolayer Black Phosphorene. <i>Journal of Physical Chemistry C</i> , 2018, 122, 6368-6378. | 1.5 | 17 |
| 110 | Crush behaviors of polyvinyl chloride cellular structures with liquid filler. <i>Composite Structures</i> , 2018, 189, 428-434. | 3.1 | 2 |
| 111 | Snell's law of elastic waves propagation on moving property interface of time-varying materials. <i>International Journal of Solids and Structures</i> , 2018, 143, 18-28. | 1.3 | 4 |
| 112 | Bioinspired, Spine-Like, Flexible, Rechargeable Lithium-Ion Batteries with High Energy Density. <i>Advanced Materials</i> , 2018, 30, e1704947. | 11.1 | 109 |
| 113 | Closed-edged bilayer phosphorene nanoribbons producing from collapsing armchair phosphorene nanotubes. <i>Nanotechnology</i> , 2018, 29, 085707. | 1.3 | 8 |
| 114 | Ballistic performance of UHMWPE fabrics/EAMS hybrid panel. <i>Journal of Materials Science</i> , 2018, 53, 7357-7371. | 1.7 | 34 |
| 115 | Theoretical investigation on the oxidation mechanism of dibutyl phthalate by hydroxyl and sulfate radicals in the gas and aqueous phase. <i>Chemical Engineering Journal</i> , 2018, 339, 381-392. | 6.6 | 18 |
| 116 | Measurement of Interfacial Fracture Toughness of Surface Coatings Using Pulsed-Laser-Induced Ultrasonic Waves. <i>Journal of Nondestructive Evaluation</i> , 2018, 37, 1. | 1.1 | 10 |
| 117 | Quaternized Chitosan/PVA Aerogels for Reversible CO ₂ Capture from Ambient Air. <i>Industrial & Engineering Chemistry Research</i> , 2018, 57, 4941-4948. | 1.8 | 79 |
| 118 | Study on Gamma Prime and Carbides of Alloy A286 by Traditional Thermodynamic Calculation. <i>High Temperature Materials and Processes</i> , 2018, 37, 495-507. | 0.6 | 3 |
| 119 | Narrow band gap and high mobility of lead-free perovskite single crystal Sn-doped MA ₃ Sb ₂ I ₉ . <i>Journal of Materials Chemistry A</i> , 2018, 6, 20753-20759. | 5.2 | 67 |
| 120 | Unconventional localization prior to wrinkles and controllable surface patterns of film/substrate bilayers through patterned cavities. <i>Extreme Mechanics Letters</i> , 2018, 25, 66-70. | 2.0 | 3 |
| 121 | Tunable surface morphology via patterned cavities in soft materials. <i>Physical Review E</i> , 2018, 98, . | 0.8 | 2 |
| 122 | Humidity effect on ion behaviors of moisture-driven CO ₂ sorbents. <i>Journal of Chemical Physics</i> , 2018, 149, 164708. | 1.2 | 25 |
| 123 | In-situ characterizations of chemo-mechanical behavior of free-standing vanadium pentoxide cathode for lithium-ion batteries during discharge-charge cycling using digital image correlation. <i>Journal of Power Sources</i> , 2018, 402, 272-280. | 4.0 | 24 |
| 124 | Predicting a two-dimensional P2S3 monolayer: A global minimum structure. <i>Computational Materials Science</i> , 2018, 155, 288-292. | 1.4 | 8 |
| 125 | PVDF/Palygorskite Nanowire Composite Electrolyte for 4 V Rechargeable Lithium Batteries with High Energy Density. <i>Nano Letters</i> , 2018, 18, 6113-6120. | 4.5 | 227 |
| 126 | Coarse-grained area-difference-elasticity membrane model coupled with IB-LB method for simulation of red blood cell morphology. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2018, 509, 1183-1194. | 1.2 | 3 |

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|-----|--|-----|-----------|
| 127 | Effects of superheat and internal heat exchanger on thermo-economic performance of organic Rankine cycle based on fluid type and heat sources. <i>Energy</i> , 2018, 159, 482-495. | 4.5 | 44 |
| 128 | Oxidation-induced negative Poisson's ratio of phosphorene. <i>Journal of Physics Condensed Matter</i> , 2018, 30, 315302. | 0.7 | 4 |
| 129 | Investigation of inner mechanism of anisotropic mechanical property of antler bone. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2018, 88, 1-10. | 1.5 | 7 |
| 130 | Effect of Degassing on the Stability and Reversibility of Glycerol/ZSM-5 Zeolite System. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1065. | 1.3 | 8 |
| 131 | Acoustic actuators based on the resonance of an acoustic-film system applied to the actuation of soft robots. <i>Journal of Sound and Vibration</i> , 2018, 432, 310-326. | 2.1 | 1 |
| 132 | A multilayer structure shear lag model applied in the tensile fracture characteristics of supersonic plasma sprayed thermal barrier coating systems based on digital image correlation. <i>Surface and Coatings Technology</i> , 2018, 350, 211-226. | 2.2 | 31 |
| 133 | Strain and defect engineering on phase transition of monolayer black phosphorene. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 21832-21843. | 1.3 | 8 |
| 134 | Prediction of a two-dimensional S ₃ N ₂ solid for optoelectronic applications. <i>Physical Review Materials</i> , 2018, 2, . | 0.9 | 10 |
| 135 | Molecular Dynamics-Decorated Finite Element Method (MDeFEM): Application to the Gating Mechanism of Mechanosensitive Channels. , 2018, , 1-52. | | 0 |
| 136 | Helical Buckling Behaviors of the Nanowire/Substrate System. , 2018, , 1-47. | | 0 |
| 137 | Hydrogen Embrittlement Cracking Produced by Indentation Test. , 2018, , 1-25. | | 0 |
| 138 | Spherical Indentation on a Prestressed Elastic Coating/Substrate System. , 2018, , 1-24. | | 0 |
| 139 | Indentation Fatigue Mechanics. , 2018, , 1-31. | | 0 |
| 140 | Crashworthiness Analysis of Electric Vehicle With Energy-Absorbing Battery Modules. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017, 139, . | 0.8 | 12 |
| 141 | Delamination-Based Measurement and Prediction of the Adhesion Energy of Thin Film/Substrate Interfaces. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017, 139, . | 0.8 | 8 |
| 142 | Special Issue Honoring Professor George Z. Voyiadjis: Multi-physical Solutions for Harsh Environments: Computations and Experiments. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 2017, 139, . | 0.8 | 0 |
| 143 | Self-Assembly of Islands on Spherical Substrates by Surface Instability. <i>ACS Nano</i> , 2017, 11, 2611-2617. | 7.3 | 14 |
| 144 | A biologically inspired artificial muscle based on fiber-reinforced and electropneumatic dielectric elastomers. <i>Smart Materials and Structures</i> , 2017, 26, 085018. | 1.8 | 20 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Architectures of soft robotic locomotion enabled by simple mechanical principles. <i>Soft Matter</i> , 2017, 13, 4441-4456. | 1.2 | 26 |
| 146 | Three dimensional wave propagation in time-varying materials: A mathematical model based on the weak solutions of continuity in the moving property interface. <i>Applied Mathematical Modelling</i> , 2017, 48, 134-152. | 2.2 | 3 |
| 147 | Mechanism of Surface Wrinkle Modulation for a Stiff Film on Compliant Substrate. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2017, 84, . | 1.1 | 17 |
| 148 | Economic analysis of a new class of vanadium redox-flow battery for medium- and large-scale energy storage in commercial applications with renewable energy. <i>Applied Thermal Engineering</i> , 2017, 114, 802-814. | 3.0 | 55 |
| 149 | A novel slithering locomotion mechanism for a snake-like soft robot. <i>Journal of the Mechanics and Physics of Solids</i> , 2017, 99, 304-320. | 2.3 | 30 |
| 150 | CO ₂ adsorption and separation from natural gas on phosphorene surface: Combining DFT and GCMC calculations. <i>Applied Surface Science</i> , 2017, 397, 206-212. | 3.1 | 23 |
| 151 | Vibration-to-electric energy conversion with porous graphene oxide-nickel electrode. <i>Journal of Power Sources</i> , 2017, 368, 73-77. | 4.0 | 7 |
| 152 | Helical buckling of wires embedded in a soft matrix under axial compression. <i>Extreme Mechanics Letters</i> , 2017, 17, 71-76. | 2.0 | 10 |
| 153 | Energy efficiency of mobile soft robots. <i>Soft Matter</i> , 2017, 13, 8223-8233. | 1.2 | 36 |
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