# Yidong Xia

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3332093/publications.pdf

Version: 2024-02-01

| | | 430874 | 434195 |
|---|---|---|---|
| 57 | 1,121 | 18 | 31 |
| papers | citations | h-index | g-index |

| | | | |
|---|---|---|---|
| 58 | 58 | 58 | 1126 |
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A reconstructed discontinuous Galerkin method based on a Hierarchical WENO reconstruction for compressible flows on tetrahedral grids. Journal of Computational Physics, 2013, 236, 477-492. | 3.8 | 94 |
| 2 | Thermodynamic and Kinetic Analysis of Lowtemperature Thermal Reduction of Graphene Oxide. Nano-Micro Letters, 2011, 3, 51-55. | 27.0 | 86 |
| 3 | A Hermite WENO reconstruction-based discontinuous Galerkin method for the Euler equations on tetrahedral grids. Journal of Computational Physics, 2012, 231, 5489-5503. | 3.8 | 69 |
| 4 | Design, modeling, and evaluation of a doublet heat extraction model in enhanced geothermal systems. Renewable Energy, 2017, 105, 232-247. | 8.9 | 69 |
| 5 | The interface inter-diffusion induced enhancement of the charge-trapping capability in HfO2/Al2O3 multilayered memory devices. Applied Physics Letters, 2013, 103, . | 3.3 | 44 |
| 6 | Memristive behaviors of LiNbO3 ferroelectric diodes. Applied Physics Letters, 2010, 97, 012902. | 3.3 | 40 |
| 7 | A set of parallel, implicit methods for a reconstructed discontinuous Galerkin method for compressible flows on 3D hybrid grids. Computers and Fluids, 2014, 98, 134-151. | 2.5 | 40 |
| 8 | Discrete element modeling of deformable pinewood chips in cyclic loading test. Powder Technology, 2019, 345, 1-14. | 4.2 | 39 |
| 9 | A TiAl2O5 nanocrystal charge trap memory device. Applied Physics Letters, 2010, 97, 143504. | 3.3 | 37 |
| 10 | Many-body dissipative particle dynamics modeling of fluid flow in fine-grained nanoporous shales. Physics of Fluids, 2017, 29, . | 4.0 | 32 |
| 11 | A Review of Computational Models for the Flow of Milled Biomass Part I: Discrete-Particle Models. ACS Sustainable Chemistry and Engineering, 2020, 8, 6142-6156. | 6.7 | 31 |
| 12 | An implicit Hermite WENO reconstruction-based discontinuous Galerkin method on tetrahedral grids. Computers and Fluids, 2014, 96, 406-421. | 2.5 | 30 |
| 13 | A Comparative Study of Rosenbrock-Type and Implicit Runge-Kutta Time Integration for Discontinuous Galerkin Method for Unsteady 3D Compressible Navier-Stokes equations. Communications in Computational Physics, 2016, 20, 1016-1044. | 1.7 | 28 |
| 14 | Carrier-tunable magnetism in two dimensional graphene-like C<sub>2</sub>N. RSC Advances, 2016, 6, 54027-54031. | 3.6 | 28 |
| 15 | Electrical field induced precipitation reaction and percolation in Ag30Ge17Se53 amorphous electrolyte films. Applied Physics Letters, 2009, 94, 162112. | 3.3 | 25 |
| 16 | A thirdâ€order implicit discontinuous Galerkin method based on a Hermite WENO reconstruction for timeâ€accurate solution of the compressible Navierâ€“Stokes equations. International Journal for Numerical Methods in Fluids, 2015, 79, 416-435. | 1.6 | 22 |
| 17 | Discrete element modeling of switchgrass particles under compression and rotational shear. Biomass and Bioenergy, 2020, 141, 105649. | 5.7 | 22 |
| 18 | A Review of Computational Models for the Flow of Milled Biomass Part II: Continuum-Mechanics Models. ACS Sustainable Chemistry and Engineering, 2020, 8, 6157-6172. | 6.7 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Flow behavior characterization of biomass Feedstocks. Powder Technology, 2021, 387, 156-180. | 4.2 | 22 |
| 20 | Conduction behavior change in amorphous LaLuO3 dielectrics based on correlated barrier hopping theory. Applied Physics Letters, 2010, 96, 182904. | 3.3 | 21 |
| 21 | OpenACC acceleration of an unstructured CFD solver based on a reconstructed discontinuous Galerkin method for compressible flows. International Journal for Numerical Methods in Fluids, 2015, 78, 123-139. | 1.6 | 21 |
| 22 | A GPU-accelerated package for simulation of flow in nanoporous source rocks with many-body dissipative particle dynamics. Computer Physics Communications, 2020, 247, 106874. | 7.5 | 20 |
| 23 | Tunable electronic structures in MPX<sub>3</sub> (M = Zn, Cd; X = S, Se) monolayers by strain engineering. RSC Advances, 2016, 6, 89901-89906. | 3.6 | 19 |
| 24 | Confinement-Mediated Phase Behavior of Hydrocarbon Fluids: Insights from Monte Carlo Simulations. Langmuir, 2020, 36, 7277-7288. | 3.5 | 18 |
| 25 | The magnetism of 1T-MX<sub>2</sub> (M = Zr, Hf; X = S, Se) monolayers by hole doping. RSC Advances, 2019, 9, 13561-13566. | 3.6 | 16 |
| 26 | Coexistence of negative photoconductivity and hysteresis in semiconducting graphene. AIP Advances, 2016, 6, . | 1.3 | 14 |
| 27 | Enhanced Performance of Organic Fieldâ€Effect Transistor Memory by Holeâ€Barrier Modulation with an Nâ€Type Organic Buffer Layer between Pentacene and Polymer Electret. Advanced Electronic Materials, 2020, 6, 1901184. | 5.1 | 14 |
| 28 | Preparation and characterization of GeTe4 thin films as a candidate for phase change memory applications. Journal of Applied Physics, 2011, 109, . | 2.5 | 13 |
| 29 | High Visibleâ€Lightâ€Stimulated Plasticity in Optoelectronic Synaptic Transistors for Irradiation Historyâ€Dependent Learning. Advanced Electronic Materials, 2020, 6, 1901255. | 5.1 | 13 |
| 30 | A reconstructed discontinuous Galerkin method for compressible turbulent flows on 3D curved grids. Computers and Fluids, 2018, 160, 26-41. | 2.5 | 12 |
| 31 | Enhancement of Memory Properties of Pentacene Field-Effect Transistor by the Reconstruction of an Inner Vertical Electric Field with an n-Type Semiconductor Interlayer. ACS Applied Materials & Interfaces, 2021, 13, 13452-13458. | 8.0 | 12 |
| 32 | Assessment of a tomography-informed polyhedral discrete element modelling approach for complex-shaped granular woody biomass in stress consolidation. Biosystems Engineering, 2021, 205, 187-211. | 4.3 | 12 |
| 33 | A nonlinear elasto-plastic bond model for the discrete element modeling of woody biomass particles. Powder Technology, 2021, 385, 557-571. | 4.2 | 12 |
| 34 | A modified many-body dissipative particle dynamics model for mesoscopic fluid simulation: methodology, calibration, and application for hydrocarbon and water. Molecular Simulation, 2021, 47, 363-375. | 2.0 | 11 |
| 35 | The elastoplastic flexural behaviour of corn stalks. Biosystems Engineering, 2022, 216, 218-228. | 4.3 | 10 |
| 36 | Band-alignment dominated retention behaviors in high-k composite charge-trapping memory devices. Applied Physics Letters, 2019, 114, . | 3.3 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Flow reduction of hydrocarbon liquid in silica nanochannel: Insight from many-body dissipative particle dynamics simulations. Journal of Molecular Liquids, 2021, , 117673. | 4.9 | 8 |
| 38 | A hybrid incremental projection method for thermal-hydraulics applications. Journal of Computational Physics, 2016, 317, 382-404. | 3.8 | 7 |
| 39 | Assessment of a Hybrid Continuous/Discontinuous Galerkin Finite Element Code for Geothermal Reservoir Simulations. Rock Mechanics and Rock Engineering, 2017, 50, 719-732. | 5.4 | 7 |
| 40 | Highâ€Performance Organic Fieldâ€Effect Transistor with Matching Energyâ€Band Alignment between Organic Semiconductor and the Chargeâ€Trapping Dielectric. Advanced Electronic Materials, 2019, 5, 1800865. | 5.1 | 7 |
| 41 | X-ray computed tomography-based porosity analysis: Algorithms and application for porous woody biomass. Powder Technology, 2021, 388, 496-504. | 4.2 | 7 |
| 42 | Electronâ€beam induced phase transformation in Î²â€Ag<sub>2</sub>Se thin films. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 135-138. | 1.8 | 6 |
| 43 | OpenACC directive-based GPU acceleration of an implicit reconstructed discontinuous Galerkin method for compressible flows on 3D unstructured grids. , 2016, , . | | 6 |
| 44 | A set of hysteretic nonlinear contact models for DEM: Theory, formulation, and application for lignocellulosic biomass. Powder Technology, 2022, 399, 117100. | 4.2 | 6 |
| 45 | Flowability of Crumbler Rotary Shear Size-Reduced Granular Biomass: An Experiment-Informed Modeling Study on the Angle of Repose. Frontiers in Energy Research, 2022, 10, . | 2.3 | 6 |
| 46 | On the Fidelity of Computational Models for the Flow of Milled Loblolly Pine: A Benchmark Study on Continuum-Mechanics Models and Discrete-Particle Models. Frontiers in Energy Research, 0, 10, . | 2.3 | 6 |
| 47 | A Parallel, Implicit Reconstructed Discontinuous Galerkin Method for the Compressible Flows on 3D Arbitrary Grids. , 2013, , . | | 5 |
| 48 | An Implicit Reconstructed Discontinuous Galerkin Method Based on Automatic Differentiation for the Navier-Stokes Equations on Tetrahedron Grids. , 2013, , . | | 5 |
| 49 | Redox-controlled memristive switching in the junctions employing Ti reactive electrodes. AIP Advances, 2011, 1, 032141. | 1.3 | 3 |
| 50 | Assessment of a hybrid finite element and finite volume code for turbulent incompressible flows. Journal of Computational Physics, 2016, 307, 653-669. | 3.8 | 3 |
| 51 | Measurement of Transport Properties of Woody Biomass Feedstock Particles Before and After Pyrolysis by Numerical Analysis of X-Ray Tomographic Reconstructions. Frontiers in Energy Research, 2022, 10, . | 2.3 | 3 |
| 52 | Modulation of the band offsets between La2Hf2O7 and fully depleted SiGe on insulator by NH3 treatment. Journal of Applied Physics, 2009, 106, 046104. | 2.5 | 2 |
| 53 | Interface modulation and resistive switching evolution in Pt/NiO x /Al2O3/n+â€“Si structure. Applied Physics A: Materials Science and Processing, 2015, 118, 1365-1370. | 2.3 | 2 |
| 54 | Flow Reduction in Pore Networks of Packed Silica Nanoparticles: Insights from Mesoscopic Fluid Models. Langmuir, 0, , . | 3.5 | 2 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 55 | Heating power lowering by downscaling the cell dimensions in nanoscale filamentary resistive switching devices. Applied Physics A: Materials Science and Processing, 2016, 122, 1. | 2.3 | 1 |
| 56 | Thermodynamic and Kinetic Analysis of Lowtemperature Thermal Reduction of Graphene Oxide. , 2011, 3, 51. | | 1 |
| 57 | Enhanced half-metallicity in the zigzag graphene nanoribbons by adsorption of the zigzag hydrogen fluoride molecular chains. AIP Advances, 2014, 4, 067132. | 1.3 | 0 |