# Geunsik Lee

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3582112/publications.pdf

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| 117 | 6,722 | 109321 | 62596 |
|---|---|---|---|
| papers | citations | 35 h-index | 80 g-index |

| 124 | 124 | 124 | 11434 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Geomimetic Hydrothermal Synthesis of Polyimideâ€Based Covalent Organic Frameworks. Angewandte Chemie, 2022, 134, . | 2.0 | 5 |
| 2 | Geomimetic Hydrothermal Synthesis of Polyimideâ€Based Covalent Organic Frameworks. Angewandte Chemie - International Edition, 2022, 61, . | 13.8 | 30 |
| 3 | Controlling interlayer magnetic coupling in the two-dimensional magnet <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2022, 105, . | 3.2 | 9 |
| 4 | Innentitelbild: Geomimetic Hydrothermal Synthesis of Polyimideâ€Based Covalent Organic Frameworks (Angew. Chem. 4/2022). Angewandte Chemie, 2022, 134, . | 2.0 | 0 |
| 5 | Machine learning assisted high-throughput screening of transition metal single atom based superb hydrogen evolution electrocatalysts. Journal of Materials Chemistry A, 2022, 10, 6679-6689. | 10.3 | 74 |
| 6 | Dissolving Diamond: Kinetics of the Dissolution of (100) and (110) Single Crystals in Nickel and Cobalt Films. Chemistry of Materials, 2022, 34, 2599-2611. | 6.7 | 3 |
| 7 | Enhanced band-filling effect in halide perovskites via hydrophobic conductive linkers. Cell Reports Physical Science, 2022, 3, 100800. | 5.6 | 3 |
| 8 | Solar-to-hydrogen peroxide conversion of photocatalytic carbon dots with anthraquinone: Unveiling the dual role of surface functionalities. Applied Catalysis B: Environmental, 2022, 312, 121379. | 20.2 | 28 |
| 9 | A single-atom vanadium-doped 2D semiconductor platform for attomolar-level molecular sensing. Journal of Materials Chemistry A, 2022, 10, 13298-13304. | 10.3 | 12 |
| 10 | Unveiling the Role of Charge Transfer in Enhanced Electrochemical Nitrogen Fixation at Single-Atom Catalysts on BX Sheets (X = As, P, Sb). Journal of Physical Chemistry Letters, 2022, 13, 4530-4537. | 4.6 | 29 |
| 11 | Fe- and Co-based magnetic tunnel junctions with AlN and ZnO spacers. Physical Review B, 2022, 105, . | 3.2 | 3 |
| 12 | Molecularly Engineered Carbon Platform To Anchor Edge-Hosted Single-Atomic Mâ€“N/C (M = Fe, Co, Ni,) Tj ETQq0 0 0 rgBT /Overlock 1 | 11.2 | 36 |
| 13 | Conformational heterogeneity of molecules physisorbed on a gold surface at room temperature. Nature Communications, 2022, 13, . | 12.8 | 7 |
| 14 | Unprecedented electrocatalytic oxygen evolution performances by cobalt-incorporated molybdenum carbide microflowers with controlled charge re-distribution. Journal of Materials Chemistry A, 2021, 9, 1770-1783. | 10.3 | 13 |
| 15 | Facile room-temperature self-assembly of extended cation-free guanine-quartet network on Mo-doped Au(111) surface. Nanoscale Advances, 2021, 3, 3867-3874. | 4.6 | 2 |
| 16 | The impact of molecular orientation on carrier transfer characteristics at a phthalocyanine and halide perovskite interface. RSC Advances, 2021, 11, 31776-31782. | 3.6 | 6 |
| 17 | Tipâ€Induced Nanoâ€Engineering of Strain, Bandgap, and Exciton Funneling in 2D Semiconductors. Advanced Materials, 2021, 33, e2008234. | 21.0 | 44 |
| 18 | Graphene Antiadhesion Layer for the Effective Peel-and-Pick Transfer of Metallic Electrodes toward Flexible Electronics. ACS Applied Materials & Interfaces, 2021, 13, 22000-22008. | 8.0 | 2 |

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|---|---|---|---|
| 19 | First principles and machine learning based superior catalytic activities and selectivities for N<sub>2</sub> reduction in MBenes, defective 2D materials and 2D Ï€-conjugated polymer-supported single atom catalysts. Journal of Materials Chemistry A, 2021, 9, 9203-9213. | 10.3 | 67 |
| 20 | Triboelectric Charge-Driven Enhancement of the Output Voltage of BiSbTe-Based Thermoelectric Generators. ACS Energy Letters, 2021, 6, 1095-1103. | 17.4 | 18 |
| 21 | Late Transition Metal Doped MXenes Showing Superb Bifunctional Electrocatalytic Activities for Water Splitting via Distinctive Mechanistic Pathways. Advanced Energy Materials, 2021, 11, 2102388. | 19.5 | 73 |
| 22 | Edge functionalized graphene nanoribbons with tunable band edges for carrier transport interlayers in organicâ€“inorganic perovskite solar cells. Physical Chemistry Chemical Physics, 2020, 22, 2955-2962. | 2.8 | 4 |
| 23 | Transport gaps in ideal zigzag-edge graphene nanoribbons with chemical edge disorder. Applied Surface Science, 2020, 512, 144714. | 6.1 | 5 |
| 24 | Immobilizing single atom catalytic sites onto highly reduced carbon hosts: Feâ€“N<sub>4</sub>/CNT as a durable oxygen reduction catalyst for Naâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 18891-18902. | 10.3 | 31 |
| 25 | Unveiling 79â€Yearâ€Old Ixene and Its BNâ€Doped Derivative. Angewandte Chemie, 2020, 132, 15001-15005. | 2.0 | 7 |
| 26 | Unveiling 79â€Yearâ€Old Ixene and Its BNâ€Doped Derivative. Angewandte Chemie - International Edition, 2020, 59, 14891-14895. | 13.8 | 29 |
| 27 | Zwitterionic Conjugated Surfactant Functionalization of Graphene with pHâ€Independent Dispersibility: An Efficient Electron Mediator for the Oxygen Evolution Reaction in Acidic Media. Small, 2020, 16, 1906635. | 10.0 | 8 |
| 28 | Ultrasensitive Plasmon-Free Surface-Enhanced Raman Spectroscopy with Femtomolar Detection Limit from 2D van der Waals Heterostructure. Nano Letters, 2020, 20, 1620-1630. | 9.1 | 60 |
| 29 | A new class of ferromagnetic semiconductor: Copper molybdate organic-inorganic compound with phenanthroline organic linkers. Journal of Magnetism and Magnetic Materials, 2020, 508, 166881. | 2.3 | 2 |
| 30 | A high performance N-doped graphene nanoribbon based spintronic device applicable with a wide range of adatoms. Nanoscale Advances, 2020, 2, 5905-5911. | 4.6 | 10 |
| 31 | Homogeneous Li deposition through the control of carbon dot-assisted Li-dendrite morphology for high-performance Li-metal batteries. Journal of Materials Chemistry A, 2019, 7, 20325-20334. | 10.3 | 35 |
| 32 | An effective approach to realize graphene based p-n junctions via adsorption of donor and acceptor molecules. Carbon, 2019, 153, 525-530. | 10.3 | 6 |
| 33 | Multiferroicity in atomic van der Waals heterostructures. Nature Communications, 2019, 10, 2657. | 12.8 | 224 |
| 34 | Band gap tuning and excitonic effect in chloroâ€“fluorinated graphene. Surface Science, 2019, 686, 39-44. | 1.9 | 11 |
| 35 | Electrocatalytic property of water oxidation reaction depends on charging state of intermediates on Ag-M (M = Fe, co, Ni, Cu) in alkaline media. International Journal of Hydrogen Energy, 2019, 44, 5863-5871. | 7.1 | 5 |
| 36 | Signature of multilayer growth of 2D layered Bi2Se3 through heteroatom-assisted step-edge barrier reduction. Npj 2D Materials and Applications, 2019, 3, . | 7.9 | 1 |

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|---|---|---|---|
| 37 | A New Perspective on the Role of Aâ€Site Cations in Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702898. | 19.5 | 47 |
| 38 | Oxygen-induced defects at the lead halide perovskite/graphene oxide interfaces. Journal of Materials Chemistry A, 2018, 6, 1423-1442. | 10.3 | 26 |
| 39 | Temperature induced crossing in the optical bandgap of mono and bilayer MoS2 on SiO2. Scientific Reports, 2018, 8, 5380. | 3.3 | 5 |
| 40 | Sulfur-vacancy-dependent geometric and electronic structure of bismuth adsorbed on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Mo</mml:mi><mml:msub><mml:mi mathvariant="normal">S</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2018, 97, . | 3.2 | 4 |
| 41 | Substitutional Growth of Methylammonium Lead Iodide Perovskites in Alcohols. Advanced Energy Materials, 2018, 8, 1701726. | 19.5 | 28 |
| 42 | Organic cation steered interfacial electron transfer within organicâ€“inorganic perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 4305-4312. | 10.3 | 15 |
| 43 | La-doped BaSnO<sub>3</sub> electron transport layer for perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 23071-23077. | 10.3 | 37 |
| 44 | Unified low-energy effective Hamiltonian and the band topology of p -block square-net layer derivatives. Physical Review B, 2018, 98, . | 3.2 | 6 |
| 45 | A highly hydrophobic fluorographene-based system as an interlayer for electron transport in organicâ€“inorganic perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 18635-18640. | 10.3 | 20 |
| 46 | Perovskite Solar Cells: A New Perspective on the Role of A-Site Cations in Perovskite Solar Cells (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf | 19.5 | 1 |
| 47 | Multicomponent electrocatalyst with ultralow Pt loading and high hydrogen evolution activity. Nature Energy, 2018, 3, 773-782. | 39.5 | 542 |
| 48 | Rashbaâ€“Dresselhaus Effect in Inorganic/Organic Lead Iodide Perovskite Interfaces. ACS Energy Letters, 2018, 3, 1294-1300. | 17.4 | 36 |
| 49 | Effects of contact material on complex excitonic behaviour of monolayer MoS2. Optical Materials, 2018, 84, 870-873. | 3.6 | 4 |
| 50 | Electronic transport across metal-graphene edge contact. 2D Materials, 2017, 4, 025033. | 4.4 | 4 |
| 51 | Density Functional Theory (DFT) Calculations for Oxygen Reduction Reaction Mechanisms on Metal-, Nitrogen- co-doped Graphene (M-N2-G (M = Ti, Cu, Mo, Nb and Ru)) Electrocatalysts. Electrochimica Acta, 2017, 228, 619-627. | 5.2 | 29 |
| 52 | Two-Dimensional Excitonic Photoluminescence in Graphene on a Cu Surface. ACS Nano, 2017, 11, 3207-3212. | 14.6 | 11 |
| 53 | Adsorption of Carbon Tetrahalides on Coronene and Graphene. Journal of Physical Chemistry C, 2017, 121, 14968-14974. | 3.1 | 11 |
| 54 | Efficient CO Oxidation by 50-Facet Cu<sub>2</sub>O Nanocrystals Coated with CuO Nanoparticles. ACS Applied Materials & Interfaces, 2017, 9, 2495-2499. | 8.0 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Screening of Oxygen-Reduction-Reaction-Efficient Electrocatalysts Based on Agâ€“M (M = 3d, 4d, and 5d) Tj ETQq1 1 0.784314 rgBT O 1874-1881. | 5.1 | 13 |
| 56 | Effects of impurity adsorption on topological surface states of Bi 2 Te 3. Europhysics Letters, 2017, 119, 47001. | 2.0 | 3 |
| 57 | Ferromagnetism in Monatomic Chains: Spin-Dependent Bandwidth Narrowing/Broadening. Journal of Physical Chemistry C, 2017, 121, 20994-21000. | 3.1 | 8 |
| 58 | Anomalous Ambipolar Transport of Organic Semiconducting Crystals via Control of Molecular Packing Structures. ACS Applied Materials & Interfaces, 2017, 9, 27839-27846. | 8.0 | 10 |
| 59 | Lower Electric Field-Driven Magnetic Phase Transition and Perfect Spin Filtering in Graphene Nanoribbons by Edge Functionalization. Journal of Physical Chemistry Letters, 2016, 7, 5049-5055. | 4.6 | 39 |
| 60 | Integrative Approach toward Uncovering the Origin of Photoluminescence in Dual Heteroatom-Doped Carbon Nanodots. Chemistry of Materials, 2016, 28, 6840-6847. | 6.7 | 128 |
| 61 | Orbital hybridization mechanism for the enhanced photoluminescence in edge-functionalized sp 2 carbon clusters. Carbon, 2016, 109, 418-427. | 10.3 | 8 |
| 62 | Oxygen Reduction Reaction Mechanisms on Al-Doped X-Graphene (X = N, P, and S) Catalysts in Acidic Medium: A Comparative DFT Study. Journal of Physical Chemistry C, 2016, 120, 26435-26441. | 3.1 | 30 |
| 63 | Electron Transport in Graphene Nanoribbon Field-Effect Transistor under Bias and Gate Voltages: Isochemical Potential Approach. Journal of Physical Chemistry Letters, 2016, 7, 2478-2482. | 4.6 | 33 |
| 64 | APEX Fingerprinting Reveals the Subcellular Localization of Proteins of Interest. Cell Reports, 2016, 15, 1837-1847. | 6.4 | 153 |
| 65 | Real-Time Propagation via Time-Dependent Density Functional Theory Plus the Hubbard U Potential for Electronâ€“Atom Coupled Dynamics Involving Charge Transfer. Journal of Chemical Theory and Computation, 2016, 12, 201-208. | 5.3 | 23 |
| 66 | Surface-Effect-Induced Optical Bandgap Shrinkage in GaN Nanotubes. Nano Letters, 2015, 15, 4472-4476. | 9.1 | 21 |
| 67 | Graphene Edges and Beyond: Temperature-Driven Structures and Electromagnetic Properties. ACS Nano, 2015, 9, 4669-4674. | 14.6 | 31 |
| 68 | Geometrical and Electronic Characteristics of Au<sub>n</sub>O<sub>2</sub><sup>â€“</sup> (n = 2â€“7). Journal of Physical Chemistry C, 2015, 119, 14383-14391. | 3.1 | 13 |
| 69 | Tailoring Electronic and Magnetic Properties of MoS<sub>2</sub> Nanotubes. Journal of Physical Chemistry C, 2015, 119, 6405-6413. | 3.1 | 40 |
| 70 | Grain Boundary Effect on Electrical Transport Properties of Graphene. Journal of Physical Chemistry C, 2014, 118, 2338-2343. | 3.1 | 71 |
| 71 | Spin-induced band modifications of graphene through intercalation of magnetic iron atoms. Nanoscale, 2014, 6, 3824-3829. | 5.6 | 51 |
| 72 | Density Functional Theory Based Study of Molecular Interactions, Recognition, Engineering, and Quantum Transport in Ï€ Molecular Systems. Accounts of Chemical Research, 2014, 47, 3321-3330. | 15.6 | 54 |

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|---|---|---|---|
| 73 | Two Dimensional Molecular Electronics Spectroscopy for Molecular Fingerprinting, DNA Sequencing, and Cancerous DNA Recognition. ACS Nano, 2014, 8, 1827-1833. | 14.6 | 65 |
| 74 | Inverse Transfer Method Using Polymers with Various Functional Groups for Controllable Graphene Doping. ACS Nano, 2014, 8, 7968-7975. | 14.6 | 26 |
| 75 | AEMnSb<sub>2</sub>(AE=Sr, Ba): a new class of Dirac materials. Journal of Physics Condensed Matter, 2014, 26, 042201. | 1.8 | 57 |
| 76 | Valley-Polarized Interlayer Conduction of Anisotropic Dirac Fermions in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SrMnBi</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review Letters, 2014, 113, 156602. | 7.8 | 48 |
| 77 | Spectroscopic evaluation of out-of-plane surface vibration bands from surface functionalization of graphite oxide by fluorination. Carbon, 2014, 77, 577-591. | 10.3 | 11 |
| 78 | Substrate-Induced Solvent Intercalation for Stable Graphene Doping. ACS Nano, 2013, 7, 1155-1162. | 14.6 | 54 |
| 79 | Noncovalent Functionalization with Alkali Metal to Separate Semiconducting from Metallic Carbon Nanotubes: A Theoretical Study. Journal of Physical Chemistry C, 2013, 117, 4309-4313. | 3.1 | 13 |
| 80 | Anisotropic Dirac electronic structures of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>A</mml:mi></mml:math>MnBi<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow | | |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Small anisotropy in iron-based superconductors induced by electron correlation. Physical Review B, 2011, 84, . | 3.2 | 7 |
| 92 | Origin of HfO2/GaAs interface states and interface passivation: A first principles study. Applied Surface Science, 2010, 256, 6569-6573. | 6.1 | 30 |
| 93 | Unusual infrared-absorption mechanism in thermally reduced graphene oxide. Nature Materials, 2010, 9, 840-845. | 27.5 | 724 |
| 94 | Isotope Effect on the Thermal Conductivity of Graphene. Journal of Nanomaterials, 2010, 2010, 1-5. | 2.7 | 45 |
| 95 | First-principles study of GaAs(001)-Î²2(2Ã—4) surface oxidation and passivation with H, Cl, S, F, and GaO. Journal of Applied Physics, 2010, 107, . | 2.5 | 74 |
| 96 | First-principles study of metalâ€“graphene interfaces. Journal of Applied Physics, 2010, 108, . | 2.5 | 358 |
| 97 | First-Principles and Quantum Transport Studies of Metal-Graphene End Contacts. Materials Research Society Symposia Proceedings, 2010, 1259, 1. | 0.1 | 2 |
| 98 | The Role of Intercalated Water in Multilayered Graphene Oxide. ACS Nano, 2010, 4, 5861-5868. | 14.6 | 359 |
| 99 | Materials Science of Graphene for Novel Device Applications. ECS Transactions, 2009, 19, 185-199. | 0.5 | 2 |
| 100 | First-Principles study of HfO2/:GaAs interface passivation by Si and Ge. Materials Research Society Symposia Proceedings, 2009, 1155, 1. | 0.1 | 0 |
| 101 | Electronic structures of zigzag graphene nanoribbons with edge hydrogenation and oxidation. Physical Review B, 2009, 79, . | 3.2 | 239 |
| 102 | Ozone Adsorption on Graphene: Ab Initio Study and Experimental Validation. Journal of Physical Chemistry C, 2009, 113, 14225-14229. | 3.1 | 170 |
| 103 | Nanoclusters of Group-III Metal Atoms on Si(111)-7 Ã— 7. Journal of Computational and Theoretical Nanoscience, 2009, 6, 1311-1319. | 0.4 | 2 |
| 104 | Self-trapping nature of Tl nanoclusters on the Si(111)-7Ã—7 surface. New Journal of Physics, 2008, 10, 053013. | 2.9 | 2 |
| 105 | Ab initiostudies of structural and electronic properties of the crystalline<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ge</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu Physical Review B, 2008, 77, . | 3.2 | 30 |
| 106 | Ab initiostudy of thallium nanoclusters on<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Si</mml:mi><mml:mrow><mml:mo>(</mml:mo><mml:mn>111</mml:mn><mml:mo>)</mml:mo></mml:mrow> Physical Review B, 2007, 76, . | 3.2 | 19 |
| 107 | Adsorption energies of Al, Ga, In, Tl on Si(111)-. Computer Physics Communications, 2007, 177, 44. | 7.5 | 2 |
| 108 | Origin of unusual work function change upon forming Tl nanoclusters on Si(111)-7x7 surface. Applied Physics A: Materials Science and Processing, 2007, 89, 431-435. | 2.3 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Electronic structure and optical absorption spectra of CdSe covered with ZnSe and ZnS epilayers. Solid State Communications, 2006, 137, 332-337. | 1.9 | 9 |
| 110 | Ab initio â€“ phase diagram of NaBH4. Solid State Communications, 2006, 139, 516-521. | 1.9 | 23 |
| 111 | Theoretical study of the electronic structure and hydrogen adsorption properties in B2-TiFe thin films with Pd coating. International Journal of Hydrogen Energy, 2004, 29, 87-92. | 7.1 | 13 |
| 112 | Numerical verification of topological crossings in band structure of solids. Journal of Physics Condensed Matter, 2003, 15, 2005-2016. | 1.8 | 5 |
| 113 | Surface electronic structure of Ti-based transition metal alloys. Physical Review B, 2002, 65, . | 3.2 | 14 |
| 114 | The electronic properties of FeCo, Ni3Mn and Ni3Fe at the orderâ€“disorder transition. Physica B: Condensed Matter, 2002, 322, 236-247. | 2.7 | 25 |
| 115 | The adsorption of hydrogen on B2 TiFe surfaces. International Journal of Hydrogen Energy, 2002, 27, 403-412. | 7.1 | 34 |
| 116 | Electronic structure of binary and ternary Ti-based shape-memory alloys. Solid State Communications, 2001, 119, 619-623. | 1.9 | 21 |
| 117 | Optical properties of TiNi, TiCo and TiFe thin films. Physica B: Condensed Matter, 2001, 304, 186-192. | 2.7 | 6 |