Michael F Toney

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1598997/publications.pdf

Version: 2024-02-01

411 papers

46,409 citations

103 h-index 2078 204 g-index

418 all docs

418 docs citations

times ranked

418

38642 citing authors

| # | Article | IF | Citations |
|----|---|--------------|-----------|
| 1 | Scattering techniques for mixed donor–acceptor characterization in organic photovoltaics. Materials Horizons, 2022, 9, 43-60. | 12.2 | 11 |
| 2 | Vapor deposition rate modifies anisotropic glassy structure of an anthracene-based organic semiconductor. Journal of Chemical Physics, 2022, 156, 014504. | 3.0 | 8 |
| 3 | Thermodynamic guiding principles of high-capacity phase transformation materials for splitting H ₂ O and CO ₂ by thermochemical looping. Journal of Materials Chemistry A, 2022, 10, 3552-3561. | 10.3 | 2 |
| 4 | Revealing temperature-dependent polymer aggregation in solution with small-angle X-ray scattering. Journal of Materials Chemistry A, 2022, 10, 2096-2104. | 10.3 | 8 |
| 5 | Reactive Vapor-Phase Additives toward Destabilizing γ-Mg(BH ₄) ₂ for Improved Hydrogen Release. ACS Applied Energy Materials, 2022, 5, 1690-1700. | 5.1 | 5 |
| 6 | Increased crystallite size in thin films of C ₆₀ and <i>p</i> rerphenyls <i>via</i> PDMS-assisted crystallization. Journal of Materials Chemistry C, 2022, 10, 5657-5665. | 5 . 5 | 0 |
| 7 | Influence of Annealing and Composition on the Crystal Structure of Mixed-Halide, Ruddlesden–Popper Perovskites. Chemistry of Materials, 2022, 34, 3109-3122. | 6.7 | 27 |
| 8 | Light-induced halide segregation in perovskites with wrinkled morphology. Journal of Energy Chemistry, 2022, 71, 83-88. | 12.9 | 2 |
| 9 | Mixing Matters: Nanoscale Heterogeneity and Stability in Metal Halide Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 471-480. | 17.4 | 23 |
| 10 | Beyond Local Solvation Structure: Nanometric Aggregates in Battery Electrolytes and Their Effect on Electrolyte Properties. ACS Energy Letters, 2022, 7, 461-470. | 17.4 | 75 |
| 11 | Why it is important to determine and report the impact of probe radiation. Joule, 2022, 6, 723-725. | 24.0 | 6 |
| 12 | Reaction-Mediated Transformation of Working Catalysts. ACS Catalysis, 2022, 12, 8007-8018. | 11.2 | 6 |
| 13 | Combined Effects of Uniform Applied Pressure and Electrolyte Additives in Lithium-Metal Batteries. ACS Applied Energy Materials, 2022, 5, 8273-8281. | 5.1 | 9 |
| 14 | Use of a Multiple Hydride Donor To Achieve an n-Doped Polymer with High Solvent Resistance. ACS Applied Materials & Samp; Interfaces, 2022, 14, 33598-33605. | 8.0 | 3 |
| 15 | Spin-Dependent Photovoltaic and Photogalvanic Responses of Optoelectronic Devices Based on Chiral Two-Dimensional Hybrid Organic–Inorganic Perovskites. ACS Nano, 2021, 15, 588-595. | 14.6 | 85 |
| 16 | Crystallization in one-step solution deposition of perovskite films: Upward or downward?. Science Advances, 2021, 7, . | 10.3 | 165 |
| 17 | Coulombically-stabilized oxygen hole polarons enable fully reversible oxygen redox. Energy and Environmental Science, 2021, 14, 4858-4867. | 30.8 | 29 |
| 18 | Quantification of heterogeneous, irreversible lithium plating in extreme fast charging of lithium-ion batteries. Energy and Environmental Science, 2021, 14, 4979-4988. | 30.8 | 58 |

| # | Article | IF | Citations |
|----|---|----------------------|------------------|
| 19 | Achieving High Thermoelectric Performance and Metallic Transport in Solventâ€6heared PEDOT:PSS. Advanced Electronic Materials, 2021, 7, 2001190. | 5.1 | 32 |
| 20 | Manipulation and statistical analysis of the fluid flow of polymer semiconductor solutions during meniscus-guided coating. MRS Bulletin, 2021, 46, 380-393. | 3.5 | 5 |
| 21 | In Situ Characterization of Ferroelectric HfO ₂ During Rapid Thermal Annealing. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000598. | 2.4 | 12 |
| 22 | Mechanism of Additive-Assisted Room-Temperature Processing of Metal Halide Perovskite Thin Films. ACS Applied Materials & Distriction (2021), 13, 13212-13225. | 8.0 | 27 |
| 23 | Using Deposition Rate and Substrate Temperature to Manipulate Liquid Crystal-Like Order in a Vapor-Deposited Hexagonal Columnar Glass. Journal of Physical Chemistry B, 2021, 125, 2761-2770. | 2.6 | 17 |
| 24 | Water-in-Salt LiTFSI Aqueous Electrolytes. 1. Liquid Structure from Combined Molecular Dynamics Simulation and Experimental Studies. Journal of Physical Chemistry B, 2021, 125, 4501-4513. | 2.6 | 52 |
| 25 | Al tool makes phase identification crystal clear. Nature Computational Science, 2021, 1, 311-312. | 8.0 | O |
| 26 | Electrochemical ion insertion from the atomic to the device scale. Nature Reviews Materials, 2021, 6, 847-867. | 48.7 | 84 |
| 27 | Controlling Polymer Morphology in Blade-Coated All-Polymer Solar Cells. Chemistry of Materials, 2021, 33, 5951-5961. | 6.7 | 14 |
| 28 | Orientation-Dependent Distortion of Lamellae in a Block Copolymer Electrolyte under DC Polarization. Macromolecules, 2021, 54, 7808-7821. | 4.8 | 12 |
| 29 | A Novel Glutathione S-Transferase Gtt2 Class (VpGSTT2) Is Found in the Genome of the AHPND/EMS Vibrio parahaemolyticus Shrimp Pathogen. Toxins, 2021, 13, 664. | 3.4 | 1 |
| 30 | Quantification of Efficiency in Lithium Metal Negative Electrodes via Operando X-ray Diffraction. Chemistry of Materials, 2021, 33, 7537-7545. | 6.7 | 17 |
| 31 | Water or Anion? Uncovering the Zn ²⁺ Solvation Environment in Mixed Zn(TFSI) ₂ and LiTFSI Water-in-Salt Electrolytes. ACS Energy Letters, 2021, 6, 3458-3463. | 17.4 | 45 |
| 32 | Toward Unraveling the Origin of Lithium Fluoride in the Solid Electrolyte Interphase. Chemistry of Materials, 2021, 33, 7315-7336. | 6.7 | 39 |
| 33 | Kinetic origins of the metastable zone width in the manganese oxide Pourbaix diagram. Journal of Materials Chemistry A, 2021, 9, 7857-7867. | 10.3 | 7 |
| 34 | Understanding Cu incorporation in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Cu</mml:mi><mml .<="" 2021,="" 5,="" diffraction.="" materials,="" physical="" resonant="" review="" structure="" td="" using="" x-ray=""><td>:mro2w> < m</td><td>ml:nn>2</td></mml></mml:msub></mml:mrow></mml:math> | :mr o2w > < m | ml : nn>2 |
| 35 | Bridging the thermodynamics and kinetics of temperature-induced morphology evolution in polymer/fullerene organic solar cell bulk heterojunction. Materials Horizons, 2021, 8, 1272-1285. | 12.2 | 21 |
| 36 | Alloying a single and a double perovskite: a Cu ^{+/2+} mixed-valence layered halide perovskite with strong optical absorption. Chemical Science, 2021, 12, 8689-8697. | 7.4 | 24 |

| # | Article | IF | CITATIONS |
|----|--|---------------|-----------|
| 37 | Improving molecular alignment and charge percolation in semiconducting polymer films with highly localized electronic states through tailored thermal annealing. Journal of Materials Chemistry C, 2021, 9, 15848-15857. | 5.5 | 8 |
| 38 | Compositional heterogeneity in Cs _{<i>y</i>} Pb(Br _{<i>x</i>} Isub>Isacience, 2021, 14, 6394-6405. | /sub> 30.8 | 20 |
| 39 | Surface equilibration mechanism controls the molecular packing of glassy molecular semiconductors at organic interfaces. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 7.1 | 11 |
| 40 | Unraveling the Unconventional Order of a High-Mobility Indacenodithiophene–Benzothiadiazole Copolymer. ACS Macro Letters, 2021, 10, 1306-1314. | 4.8 | 20 |
| 41 | Emerging X-ray imaging technologies for energy materials. Materials Today, 2020, 34, 132-147. | 14.2 | 70 |
| 42 | High-capacity thermochemical CO ₂ dissociation using iron-poor ferrites. Energy and Environmental Science, 2020, 13, 592-600. | 30.8 | 23 |
| 43 | Structural Origins of Light-Induced Phase Segregation in Organic-Inorganic Halide Perovskite Photovoltaic Materials. Matter, 2020, 2, 207-219. | 10.0 | 128 |
| 44 | Size-Dependent Lattice Structure and Confinement Properties in CsPbl ₃ Perovskite Nanocrystals: Negative Surface Energy for Stabilization. ACS Energy Letters, 2020, 5, 238-247. | 17.4 | 201 |
| 45 | Fine-Tuning Semiconducting Polymer Self-Aggregation and Crystallinity Enables Optimal Morphology and High-Performance Printed All-Polymer Solar Cells. Journal of the American Chemical Society, 2020, 142, 392-406. | 13.7 | 143 |
| 46 | Inducing Molecular Aggregation of Polymer Semiconductors in a Secondary Insulating Polymer Matrix to Enhance Charge Transport. Chemistry of Materials, 2020, 32, 897-905. | 6.7 | 40 |
| 47 | Impact of Processing on Structural and Compositional Evolution in Mixed Metal Halide Perovskites during Film Formation. Advanced Functional Materials, 2020, 30, 2001752. | 14.9 | 39 |
| 48 | Heterogeneous Behavior of Lithium Plating during Extreme Fast Charging. Cell Reports Physical Science, 2020, 1, 100114. | 5.6 | 49 |
| 49 | Test of the Dynamic-Domain and Critical Scattering Hypotheses in Cubic Methylammonium Lead Triiodide. Physical Review Letters, 2020, 125, . | 7.8 | 13 |
| 50 | Understanding additive controlled lithium morphology in lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 16960-16972. | 10.3 | 26 |
| 51 | Covalently Linked, Two-Dimensional Quantum Dot Assemblies. Langmuir, 2020, 36, 9944-9951. | 3.5 | 4 |
| 52 | Tuning Intra and Intermolecular Interactions for Balanced Hole and Electron Transport in Semiconducting Polymers. Chemistry of Materials, 2020, 32, 7338-7346. | 6.7 | 24 |
| 53 | Preferred crystallographic orientation of cellulose in plant primary cell walls. Nature Communications, 2020, 11, 4720. | 12.8 | 41 |
| 54 | Sulfur-Donor Solvents Strongly Coordinate Pb ²⁺ in Hybrid Organic–Inorganic Perovskite Precursor Solutions. Journal of Physical Chemistry C, 2020, 124, 14496-14502. | 3.1 | 38 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 55 | Surface regulation enables high stability of single-crystal lithium-ion cathodes at high voltage. Nature Communications, 2020, 11 , 3050. | 12.8 | 225 |
| 56 | Melting of Magnesium Borohydride under High Hydrogen Pressure: Thermodynamic Stability and Effects of Nanoconfinement. Chemistry of Materials, 2020, 32, 5604-5615. | 6.7 | 18 |
| 57 | NASICON Na ₃ V ₂ (PO ₄) ₃ Enables Quasi-Two-Stage Na ⁺ and Zn ²⁺ Intercalation for Multivalent Zinc Batteries. Chemistry of Materials, 2020, 32, 3028-3035. | 6.7 | 75 |
| 58 | Using resonant energy X-ray diffraction to extract chemical order parameters in ternary semiconductors. Journal of Materials Chemistry C, 2020, 8, 4350-4356. | 5.5 | 13 |
| 59 | Synthesis of Poly(bisisoindigo) Using a Metal-Free Aldol Polymerization for Thin-Film Transistor Applications. ACS Applied Materials & Samp; Interfaces, 2020, 12, 14265-14271. | 8.0 | 20 |
| 60 | FA _{<i>x</i>} Cs _{1â€"<i>x</i>} Pbl ₃ Nanocrystals: Tuning Crystal Symmetry by A-Site Cation Composition. ACS Energy Letters, 2020, 5, 2475-2482. | 17.4 | 34 |
| 61 | Toward quantifying capacity losses due to solid electrolyte interphase evolution in silicon thin film batteries. Journal of Chemical Physics, 2020, 152, 084702. | 3.0 | 25 |
| 62 | Bottom-up synthesis of protein-based nanomaterials from engineered \hat{l}^2 -solenoid proteins. PLoS ONE, 2020, 15, e0229319. | 2.5 | 10 |
| 63 | Molecular Orientation for Vapor-Deposited Organic Glasses Follows Rate-Temperature Superposition: The Case of Posaconazole. Journal of Physical Chemistry B, 2020, 124, 2505-2513. | 2.6 | 19 |
| 64 | Degradation mechanisms in mixed-cation and mixed-halide Cs _x FA _{1â^'x} Pb(Br _y I _{1â^'y}) ₃ perovskite films under ambient conditions. Journal of Materials Chemistry A, 2020, 8, 9302-9312. | 10.3 | 26 |
| 65 | Synthesis and Crystallization of Atomic Layer Deposition \hat{l}^2 -Eucryptite LiAlSiO (sub > 4 < /sub > Thin-Film Solid Electrolytes. ACS Applied Materials & Each Solid Electrolytes. ACS Applied Materials & Each Solid Electrolytes. | 8.0 | 6 |
| 66 | Highly Reversible Plating/Stripping of Porous Zinc Anodes for Multivalent Zinc Batteries. Journal of the Electrochemical Society, 2020, 167, 140520. | 2.9 | 14 |
| 67 | Synthesis of Polycrystalline Ruddlesden–Popper Organic Lead Halides and Their Growth Dynamics. Chemistry of Materials, 2019, 31, 9472-9479. | 6.7 | 18 |
| 68 | Advanced X-ray Scattering and Spectroscopy Characterization of an Antisoiling Coating for Solar Module Glass. ACS Applied Energy Materials, 2019, 2, 7870-7878. | 5.1 | 5 |
| 69 | Vapor deposition of a nonmesogen prepares highly structured organic glasses. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21421-21426. | 7.1 | 30 |
| 70 | Confined Interlayer Water Promotes Structural Stability for High-Rate Electrochemical Proton Intercalation in Tungsten Oxide Hydrates. ACS Energy Letters, 2019, 4, 2805-2812. | 17.4 | 88 |
| 71 | Effect of Extensional Flow on the Evaporative Assembly of a Donor–Acceptor Semiconducting Polymer. ACS Applied Electronic Materials, 2019, 1, 2445-2454. | 4.3 | 4 |
| 72 | Shedding X-ray Light on the Interfacial Electrochemistry of Silicon Anodes for Li-Ion Batteries. Accounts of Chemical Research, 2019, 52, 2673-2683. | 15.6 | 25 |

| # | Article | IF | CITATIONS |
|----|---|------|-----------|
| 73 | RNA binding candidates for human ADAR3 from substrates of a gain of function mutant expressed in neuronal cells. Nucleic Acids Research, 2019, 47, 10801-10814. | 14.5 | 17 |
| 74 | Fullerene derivative induced morphology of bulk heterojunction blends: PIPCP:PC ₆₁ BM. RSC Advances, 2019, 9, 4106-4112. | 3.6 | 10 |
| 75 | A map of the inorganic ternary metal nitrides. Nature Materials, 2019, 18, 732-739. | 27.5 | 274 |
| 76 | Augmenting n-Type Performance of Ambipolar Top-Contact Organic Thin-Film Transistors by Self-Generated Interlayers. Chemistry of Materials, 2019, 31, 7046-7053. | 6.7 | 13 |
| 77 | Vapor-Deposited Glass Structure Determined by Deposition Rate–Substrate Temperature Superposition Principle. Journal of Physical Chemistry Letters, 2019, 10, 3536-3542. | 4.6 | 33 |
| 78 | Ptychography of Organic Thin Films at Soft X-ray Energies. Chemistry of Materials, 2019, 31, 4913-4918. | 6.7 | 7 |
| 79 | Carbon Acidity in Enzyme Active Sites. Frontiers in Bioengineering and Biotechnology, 2019, 7, 25. | 4.1 | 9 |
| 80 | Acceptor Gradient Polymer Donors for Non-Fullerene Organic Solar Cells. Chemistry of Materials, 2019, 31, 9729-9741. | 6.7 | 15 |
| 81 | Li gradients for Li-rich cathodes. Nature Energy, 2019, 4, 1014-1015. | 39.5 | 12 |
| 82 | Analysis and Simulation of One-Dimensional Transport Models for Lithium Symmetric Cells. Journal of the Electrochemical Society, 2019, 166, A3806-A3819. | 2.9 | 12 |
| 83 | Tuning the bandgap of Cs ₂ AgBiBr ₆ through dilute tin alloying. Chemical Science, 2019, 10, 10620-10628. | 7.4 | 58 |
| 84 | Origin of Anisotropic Molecular Packing in Vapor-Deposited Alq3 Glasses. Journal of Physical Chemistry Letters, 2019, 10, 164-170. | 4.6 | 49 |
| 85 | Hydrogen Purification in Palladium-Based Membranes: An Operando X-ray Diffraction Study. Industrial & Lamp; Engineering Chemistry Research, 2019, 58, 926-934. | 3.7 | 11 |
| 86 | Solid Electrolyte Interphase on Native Oxide-Terminated Silicon Anodes for Li-Ion Batteries. Joule, 2019, 3, 762-781. | 24.0 | 185 |
| 87 | Negative-pressure polymorphs made by heterostructural alloying. Science Advances, 2018, 4, eaaq1442. | 10.3 | 34 |
| 88 | Fluoroethylene Carbonate Induces Ordered Electrolyte Interface on Silicon and Sapphire Surfaces as Revealed by Sum Frequency Generation Vibrational Spectroscopy and X-ray Reflectivity. Nano Letters, 2018, 18, 2105-2111. | 9.1 | 42 |
| 89 | Graphene induced electrical percolation enables more efficient charge transport at a hybrid organic semiconductor/graphene interface. Physical Chemistry Chemical Physics, 2018, 20, 4422-4428. | 2.8 | 13 |
| 90 | The meniscus-guided deposition of semiconducting polymers. Nature Communications, 2018, 9, 534. | 12.8 | 324 |

| # | Article | IF | Citations |
|-----|---|--------------|-----------|
| 91 | The nanoscale structure of the electrolyte–metal oxide interface. Energy and Environmental Science, 2018, 11, 594-602. | 30.8 | 46 |
| 92 | Absence of Mixed Phase in Organic Photovoltaic Active Layers Facilitates Use of Green Solvent Processing. Journal of Physical Chemistry C, 2018, 122, 11136-11144. | 3.1 | 10 |
| 93 | Morphological, Chemical, and Electronic Changes of the Conjugated Polymer PTB7 with Thermal Annealing. IScience, 2018, 2, 182-192. | 4.1 | 37 |
| 94 | Controlling Thin-Film Stress and Wrinkling during Perovskite Film Formation. ACS Energy Letters, 2018, 3, 1225-1232. | 17.4 | 148 |
| 95 | Langmuir–Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles. ACS Applied Materials & Langmuir†(Blodgett Thin Films of Diketopyrrolopyrrole-Based Amphiphiles) (Blodgett Thin Films of Diketopyrrol | 8.0 | 17 |
| 96 | Operando Spectromicroscopy of Sulfur Species in Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2018, 165, A6043-A6050. | 2.9 | 21 |
| 97 | Acoustic phonon lifetimes limit thermal transport in methylammonium lead iodide. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11905-11910. | 7.1 | 81 |
| 98 | Direct Observation of Structural Evolution of Metal Chalcogenide in Electrocatalytic Water Oxidation. ACS Nano, 2018, 12, 12369-12379. | 14.6 | 366 |
| 99 | Donor Conjugated Polymers with Polar Side Chain Groups: The Role of Dielectric Constant and Energetic Disorder on Photovoltaic Performance. Advanced Functional Materials, 2018, 28, 1803418. | 14.9 | 42 |
| 100 | Effect of Molecular Shape on the Properties of Non-Fullerene Acceptors: Contrasting Calamitic Versus 3D Design Principles. ACS Applied Energy Materials, 2018, 1, 6513-6523. | 5.1 | 10 |
| 101 | Impact of Surfaces on Photoinduced Halide Segregation in Mixed-Halide Perovskites. ACS Energy Letters, 2018, 3, 2694-2700. | 17.4 | 184 |
| 102 | Impact of Polymer Side Chain Modification on OPV Morphology and Performance. Chemistry of Materials, 2018, 30, 7872-7884. | 6.7 | 38 |
| 103 | General Post-annealing Method Enables High-Efficiency Two-Dimensional Perovskite Solar Cells. ACS Applied Materials & Solar Cells. ACS Applied Materials & Solar Cells. ACS | 8.0 | 66 |
| 104 | Engineering Stress in Perovskite Solar Cells to Improve Stability. Advanced Energy Materials, 2018, 8, 1802139. | 19.5 | 271 |
| 105 | Compositional and orientational control in metal halide perovskites of reduced dimensionality. Nature Materials, 2018, 17, 900-907. | 27. 5 | 351 |
| 106 | Kinetic Versus Thermodynamic Orientational Preferences for a Series of Isomorphic Molecular Semiconductors. ACS Omega, 2018, 3, 10198-10204. | 3.5 | 15 |
| 107 | <i>In silico</i> stress–strain measurements on self-assembled protein lattices. Soft Matter, 2018, 14, 8095-8104. | 2.7 | 2 |
| 108 | Stable solvent for solution-based electrical doping of semiconducting polymer films and its application to organic solar cells. Energy and Environmental Science, 2018, 11, 2216-2224. | 30.8 | 32 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 109 | Electrochemical trapping of metastable Mn ³⁺ ions for activation of MnO ₂ oxygen evolution catalysts. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E5261-E5268. | 7.1 | 173 |
| 110 | Enhancing Molecular Alignment and Charge Transport of Solutionâ€Sheared Semiconducting Polymer Films by the Electricalâ€Blade Effect. Advanced Electronic Materials, 2018, 4, 1800110. | 5.1 | 27 |
| 111 | Microstructural Evolution of the Thin Films of a Donor–Acceptor Semiconducting Polymer Deposited by Meniscus-Guided Coating. Macromolecules, 2018, 51, 4325-4340. | 4.8 | 21 |
| 112 | Triptycene as a Supramolecular Additive in PTB7:PCBM Blends and Its Influence on Photovoltaic Properties. ACS Applied Materials & Samp; Interfaces, 2018, 10, 24665-24678. | 8.0 | 9 |
| 113 | Novel ALD Chemistry Enabled Low-Temperature Synthesis of Lithium Fluoride Coatings for Durable Lithium Anodes. ACS Applied Materials & Interfaces, 2018, 10, 26972-26981. | 8.0 | 99 |
| 114 | Transformation from crystalline precursor to perovskite in PbCl2-derived MAPbl3. Nature Communications, 2018, 9, 3458. | 12.8 | 77 |
| 115 | Humidity-Induced Photoluminescence Hysteresis in Variable Cs/Br Ratio Hybrid Perovskites. Journal of Physical Chemistry Letters, 2018, 9, 3463-3469. | 4.6 | 50 |
| 116 | The use of poly-cation oxides to lower the temperature of two-step thermochemical water splitting. Energy and Environmental Science, 2018, 11, 2172-2178. | 30.8 | 105 |
| 117 | Thermal engineering of FAPbI3 perovskite material via radiative thermal annealing and in situ XRD. Nature Communications, 2017, 8, 14075. | 12.8 | 149 |
| 118 | Site-directed mutant libraries for isolating minimal mutations yielding functional changes. Protein Engineering, Design and Selection, 2017, 30, 347-357. | 2.1 | 7 |
| 119 | Tuning crystalline ordering by annealing and additives to study its effect on exciton diffusion in a polyalkylthiophene copolymer. Physical Chemistry Chemical Physics, 2017, 19, 12441-12451. | 2.8 | 23 |
| 120 | Radiative Thermal Annealing/in Situ X-ray Diffraction Study of Methylammonium Lead Triiodide: Effect of Antisolvent, Humidity, Annealing Temperature Profile, and Film Substrates. Chemistry of Materials, 2017, 29, 5931-5941. | 6.7 | 35 |
| 121 | Exploring the influence of iron substitution in lithium rich layered oxides Li ₂ Ru _{1â^x} Fe _x O ₃ : triggering the anionic redox reaction. Journal of Materials Chemistry A, 2017, 5, 14387-14396. | 10.3 | 18 |
| 122 | Correlating photovoltaic properties of a PTB7-Th:PC ₇₁ BM blend to photophysics and microstructure as a function of thermal annealing. Journal of Materials Chemistry A, 2017, 5, 14646-14657. | 10.3 | 61 |
| 123 | Defect-Induced Band-Edge Reconstruction of a Bismuth-Halide Double Perovskite for Visible-Light Absorption. Journal of the American Chemical Society, 2017, 139, 5015-5018. | 13.7 | 288 |
| 124 | Solution-Phase Conformation and Dynamics of Conjugated Isoindigo-Based Donor–Acceptor Polymer Single Chains. Journal of Physical Chemistry Letters, 2017, 8, 5479-5486. | 4.6 | 24 |
| 125 | Extraordinarily Stable Amyloid Fibrils Engineered from Structurally Defined \hat{l}^2 -Solenoid Proteins. Biochemistry, 2017, 56, 6041-6050. | 2.5 | 14 |
| 126 | Vapor-Deposited Glasses with Long-Range Columnar Liquid Crystalline Order. Chemistry of Materials, 2017, 29, 9110-9119. | 6.7 | 25 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 127 | High-performance sodium–organic battery by realizing four-sodium storage in disodium rhodizonate. Nature Energy, 2017, 2, 861-868. | 39.5 | 372 |
| 128 | Mechanism of Tin Oxidation and Stabilization by Lead Substitution in Tin Halide Perovskites. ACS Energy Letters, 2017, 2, 2159-2165. | 17.4 | 351 |
| 129 | Versatile Interpenetrating Polymer Network Approach to Robust Stretchable Electronic Devices. Chemistry of Materials, 2017, 29, 7645-7652. | 6.7 | 101 |
| 130 | Vanadium As a Potential Membrane Material for Carbon Capture: Effects of Minor Flue Gas Species. Environmental Science & Envir | 10.0 | 9 |
| 131 | The Atomic Scale Electrochemical Lithiation and Delithiation Process of Silicon. Advanced Materials Interfaces, 2017, 4, 1700771. | 3.7 | 39 |
| 132 | Using heterostructural alloying to tune the structure and properties of the thermoelectric Sn _{1â^'x} Ca _x Se. Journal of Materials Chemistry A, 2017, 5, 16873-16882. | 10.3 | 19 |
| 133 | Unique Reversible Crystal-to-Crystal Phase Transition—Structural and Functional Properties of Fused Ladder Thienoarenes. Chemistry of Materials, 2017, 29, 7686-7696. | 6.7 | 8 |
| 134 | Simplified Models for Accelerated Structural Prediction of Conjugated Semiconducting Polymers. Journal of Physical Chemistry C, 2017, 121, 26528-26538. | 3.1 | 11 |
| 135 | High-fraction brookite films from amorphous precursors. Scientific Reports, 2017, 7, 15232. | 3.3 | 56 |
| 136 | High Tensile Strength of Engineered \hat{l}^2 -Solenoid Fibrils via Sonication and Pulling. Biophysical Journal, 2017, 113, 1945-1955. | 0.5 | 7 |
| 137 | Band Gap Tuning via Lattice Contraction and Octahedral Tilting in Perovskite Materials for Photovoltaics. Journal of the American Chemical Society, 2017, 139, 11117-11124. | 13.7 | 570 |
| 138 | Local Mechanical Perturbation Provides an Effective Means to Regulate the Growth and Assembly of Functional Peptide Fibrils. Small, 2016, 12, 6407-6415. | 10.0 | 6 |
| 139 | Biological conversion of gaseous alkenes to liquid chemicals. Metabolic Engineering, 2016, 38, 98-104. | 7.0 | 13 |
| 140 | The formation mechanism for printed silver-contacts for silicon solar cells. Nature Communications, 2016, 7, 11143. | 12.8 | 106 |
| 141 | Hybrid Organic–Inorganic Perovskites (HOIPs): Opportunities and Challenges. Advanced Materials, 2015, 27, 5102-5112. | 21.0 | 372 |
| 142 | Storage Capacity and Cycling Stability in Ge Anodes: Relationship of Anode Structure and Cycling Rate. Advanced Energy Materials, 2015, 5, 1500599. | 19.5 | 51 |
| 143 | Extraction of pore-morphology and capillary pressure curves of porous media from synchrotron-based tomography data. Scientific Reports, 2015, 5, 10635. | 3.3 | 20 |
| 144 | Rapid thermal processing chamber for <i>in-situ</i> x-ray diffraction. Review of Scientific Instruments, 2015, 86, 013902. | 1.3 | 15 |

| # | Article | lF | Citations |
|-----|---|------------------|-----------|
| 145 | Structural Characterization of Vapor-Deposited Glasses of an Organic Hole Transport Material with X-ray Scattering. Chemistry of Materials, 2015, 27, 3341-3348. | 6.7 | 78 |
| 146 | Engineering Amyloid Fibrils from \hat{l}^2 -Solenoid Proteins for Biomaterials Applications. ACS Nano, 2015, 9, 449-463. | 14.6 | 60 |
| 147 | Emerging In Situ and Operando Nanoscale Xâ€Ray Imaging Techniques for Energy Storage Materials. Advanced Functional Materials, 2015, 25, 1622-1637. | 14.9 | 95 |
| 148 | Thermotropic Phase Transition of Benzodithiophene Copolymer Thin Films and Its Impact on Electrical and Photovoltaic Characteristics. Chemistry of Materials, 2015, 27, 1223-1232. | 6.7 | 12 |
| 149 | (Cu <inline-formula> <tex-math>\$_{f} Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 592 Td (2}\$<td>ex-math&g 2.5</td><td>gt;</td></tex-math></inline-formula> | ex-math&g 2.5 | gt; |
| 150 | *\\$&\tag{t, &\tag{t, &\tag{t, linkine-formula> Alloys IEEE lournal of Photovoltaics, 2015, 5, 372,377} Effects of aromatic regularity on the structure and conductivity of polyimideâ€poly(ethylene glycol) materials doped with ionic liquid. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 509-521. | 2.1 | 8 |
| 151 | Registration of the rotation axis in X-ray tomography. Journal of Synchrotron Radiation, 2015, 22, 452-457. | 2.4 | 19 |
| 152 | Conversion of Aminodeoxychorismate Synthase into Anthranilate Synthase with Janus Mutations: Mechanism of Pyruvate Elimination Catalyzed by Chorismate Enzymes. Biochemistry, 2015, 54, 2372-2384. | 2.5 | 14 |
| 153 | Reversible Multivalent (Monovalent, Divalent, Trivalent) Ion Insertion in Open Framework Materials. Advanced Energy Materials, 2015, 5, 1401869. | 19.5 | 185 |
| 154 | Tunable mesoscale-structured self-assembled hydrogels synthesized by organocatalytic ring-opening polymerization. Polymer, 2015, 65, 93-104. | 3.8 | 2 |
| 155 | Effect of Solution Shearing Method on Packing and Disorder of Organic Semiconductor Polymers. Chemistry of Materials, 2015, 27, 2350-2359. | 6.7 | 92 |
| 156 | Flow-enhanced solution printing of all-polymer solar cells. Nature Communications, 2015, 6, 7955. | 12.8 | 221 |
| 157 | Effect of Al ₂ O ₃ Coating on Stabilizing LiNi _{0.4} Mn _{0.4} Co _{0.2} O ₂ Cathodes. Chemistry of Materials, 2015, 27, 6146-6154. | 6.7 | 185 |
| 158 | Directed evolution of the substrate specificity of dialkylglycine decarboxylase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 146-155. | 2.3 | 14 |
| 159 | Ultrafast Electron Transfer at Organic Semiconductor Interfaces: Importance of Molecular Orientation. Journal of Physical Chemistry Letters, 2015, 6, 6-12. | 4.6 | 52 |
| 160 | Nitrate reductase 15N discrimination in Arabidopsis thaliana, Zea mays, Aspergillus niger, Pichea angusta, and Escherichia coli. Frontiers in Plant Science, 2014, 5, 317. | 3.6 | 16 |
| 161 | Spectromicroscopy and coherent diffraction imaging: focus on energy materials applications. Journal of Synchrotron Radiation, 2014, 21, 1019-1030. | 2.4 | 27 |
| 162 | Dependence of Crystallite Formation and Preferential Backbone Orientations on the Side Chain Pattern in PBDTTPD Polymers. ACS Applied Materials & Samp; Interfaces, 2014, 6, 19477-19481. | 8.0 | 36 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 163 | Chloride in Lead Chloride-Derived Organo-Metal Halides for Perovskite-Absorber Solar Cells. Chemistry of Materials, 2014, 26, 7158-7165. | 6.7 | 256 |
| 164 | High-resolution x-ray analysis of graphene grown on 4H–SiC (000) at low pressures. Journal of Materials Research, 2014, 29, 439-446. | 2.6 | 1 |
| 165 | Controlling Solutionâ€Phase Polymer Aggregation with Molecular Weight and Solvent Additives to Optimize Polymerâ€Fullerene Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2014, 4, 1301733. | 19.5 | 194 |
| 166 | Effect of Backbone Regioregularity on the Structure and Orientation of a Donor–Acceptor Semiconducting Copolymer. Macromolecules, 2014, 47, 1403-1410. | 4.8 | 76 |
| 167 | Impact of Hole Transport Layer Surface Properties on the Morphology of a Polymerâ€Fullerene Bulk Heterojunction. Advanced Energy Materials, 2014, 4, 1301879. | 19.5 | 28 |
| 168 | A Mechanistic Understanding of Processing Additiveâ€Induced Efficiency Enhancement in Bulk Heterojunction Organic Solar Cells. Advanced Materials, 2014, 26, 300-305. | 21.0 | 145 |
| 169 | Effect of Nonâ€Chlorinated Mixed Solvents on Charge Transport and Morphology of Solutionâ€Processed Polymer Fieldâ€Effect Transistors. Advanced Functional Materials, 2014, 24, 3524-3534. | 14.9 | 89 |
| 170 | Mechanism of Crystallization and Implications for Charge Transport in Poly(3â€ethylhexylthiophene) Thin Films. Advanced Functional Materials, 2014, 24, 4515-4521. | 14.9 | 66 |
| 171 | Substrate-Induced Variations of Molecular Packing, Dynamics, and Intermolecular Electronic Couplings in Pentacene Monolayers on the Amorphous Silica Dielectric. ACS Nano, 2014, 8, 690-700. | 14.6 | 25 |
| 172 | Control of the Electrical Properties in Spinel Oxides by Manipulating the Cation Disorder. Advanced Functional Materials, 2014, 24, 610-618. | 14.9 | 109 |
| 173 | Aspartate aminotransferase: An old dog teaches new tricks. Archives of Biochemistry and Biophysics, 2014, 544, 119-127. | 3.0 | 99 |
| 174 | Sequentially solution-processed, nanostructured polymer photovoltaics using selective solvents. Energy and Environmental Science, 2014, 7, 1103. | 30.8 | 56 |
| 175 | Ultra-high mobility transparent organic thin film transistors grown by an off-centre spin-coating method. Nature Communications, 2014, 5, 3005. | 12.8 | 1,155 |
| 176 | Full open-framework batteries for stationary energy storage. Nature Communications, 2014, 5, 3007. | 12.8 | 440 |
| 177 | The Role of Solvent Additive Processing in High Performance Small Molecule Solar Cells. Chemistry of Materials, 2014, 26, 6531-6541. | 6.7 | 58 |
| 178 | Morphological Origin of Charge Transport Anisotropy in Aligned Polythiophene Thin Films. Advanced Functional Materials, 2014, 24, 3422-3431. | 14.9 | 77 |
| 179 | Understanding the Selective Etching of Electrodeposited ZnO Nanorods. Langmuir, 2014, 30, 14079-14085. | 3.5 | 15 |
| 180 | Use of a commercially available nucleating agent to control the morphological development of solution-processed small molecule bulk heterojunction organic solar cells. Journal of Materials Chemistry A, 2014, 2, 15717-15721. | 10.3 | 43 |

| # | Article | IF | CITATIONS |
|-----|---|-----------------|-----------|
| 181 | Understanding Phase Transformation in Crystalline Ge Anodes for Li-lon Batteries. Chemistry of Materials, 2014, 26, 3739-3746. | 6.7 | 112 |
| 182 | Experimental Characterization of a Theoretically Designed Candidate p-Type Transparent Conducting Oxide: Li-Doped Cr ₂ MnO ₄ . Chemistry of Materials, 2014, 26, 4598-4604. | 6.7 | 14 |
| 183 | Tuning the Morphology of All-Polymer OPVs through Altering Polymer–Solvent Interactions. Chemistry of Materials, 2014, 26, 5020-5027. | 6.7 | 54 |
| 184 | Crystallizationâ€Induced Phase Separation in Solutionâ€Processed Small Molecule Bulk Heterojunction Organic Solar Cells. Advanced Functional Materials, 2014, 24, 3543-3550. | 14.9 | 66 |
| 185 | Molecular Interactions and Ordering in Electrically Doped Polymers: Blends of PBTTT and F ₄ TCNQ. Macromolecules, 2014, 47, 6836-6846. | 4.8 | 164 |
| 186 | Self-Doping and Electrical Conductivity in Spinel Oxides: Experimental Validation of Doping Rules. Chemistry of Materials, 2014, 26, 1867-1873. | 6.7 | 35 |
| 187 | Ordering Effects in Benzo[1,2â€ <i>b</i> :4,5â€ <i>b</i> ′]difuranâ€thieno[3,4â€ <i>c</i>]pyrroleâ€4,6â€dione Pwith >7% Solar Cell Efficiency. Advanced Materials, 2014, 26, 4357-4362. | olymers 21.0 | 85 |
| 188 | Operando Transmission X-ray Microscopy Studies on Li-lon Batteries. Microscopy and Microanalysis, 2014, 20, 1526-1527. | 0.4 | 2 |
| 189 | A general relationship between disorder, aggregation and charge transport in conjugated polymers. Nature Materials, 2013, 12, 1038-1044. | 27.5 | 1,742 |
| 190 | Controlling the Texture and Crystallinity of Evaporated Lead Phthalocyanine Thin Films for Near-Infrared Sensitive Solar Cells. ACS Applied Materials & Samp; Interfaces, 2013, 5, 8505-8515. | 8.0 | 53 |
| 191 | Effect of Surfactant Concentration and Aggregation on the Growth Kinetics of Nickel Nanoparticles. Journal of Physical Chemistry C, 2013, 117, 16709-16718. | 3.1 | 68 |
| 192 | Effects of Odd–Even Side Chain Length of Alkyl-Substituted Diphenylbithiophenes on First Monolayer Thin Film Packing Structure. Journal of the American Chemical Society, 2013, 135, 11006-11014. | 13.7 | 81 |
| 193 | Charge Transport in Highly Face-On Poly(3-hexylthiophene) Films. Journal of Physical Chemistry C, 2013, 117, 17421-17428. | 3.1 | 95 |
| 194 | Efficient Energy Sensitization of C ₆₀ and Application to Organic Photovoltaics. Journal of the American Chemical Society, 2013, 135, 11920-11928. | 13.7 | 17 |
| 195 | Vertical confinement and interface effects on the microstructure and charge transport of P3HT thin films. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 611-620. | 2.1 | 87 |
| 196 | Swelling of Polymer Dielectric Thin Films for Organic-Transistor-Based Aqueous Sensing Applications. Chemistry of Materials, 2013, 25, 5018-5022. | 6.7 | 8 |
| 197 | Dynamical Orientation of Large Molecules on Oxide Surfaces and its Implications for Dye-Sensitized Solar Cells. Chemistry of Materials, 2013, 25, 4354-4363. | 6.7 | 15 |
| 198 | Enhanced Solid-State Order and Field-Effect Hole Mobility through Control of Nanoscale Polymer Aggregation. Journal of the American Chemical Society, 2013, 135, 19229-19236. | 13.7 | 194 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 199 | Tuning Contact Recombination and Open-Circuit Voltage in Polymer Solar Cells via Self-Assembled Monolayer Adsorption at the Organic–Metal Oxide Interface. Journal of Physical Chemistry C, 2013, 117, 20474-20484. | 3.1 | 39 |
| 200 | Rapid fabrication of a novel Sn–Ge alloy: structure–property relationship and its enhanced lithium storage properties. Journal of Materials Chemistry A, 2013, 1, 14577. | 10.3 | 47 |
| 201 | Dealloyed PdCu3 thin film electrocatalysts for oxygen reduction reaction. Journal of Power Sources, 2013, 222, 169-176. | 7.8 | 50 |
| 202 | Comparison of the Photovoltaic Characteristics and Nanostructure of Fullerenes Blended with Conjugated Polymers with Siloxane-Terminated and Branched Aliphatic Side Chains. Chemistry of Materials, 2013, 25, 431-440. | 6.7 | 74 |
| 203 | Janus: Prediction and Ranking of Mutations Required for Functional Interconversion of Enzymes. Journal of Molecular Biology, 2013, 425, 1378-1389. | 4.2 | 21 |
| 204 | Scalable and Selective Dispersion of Semiconducting Arc-Discharged Carbon Nanotubes by Dithiafulvalene/Thiophene Copolymers for Thin Film Transistors. ACS Nano, 2013, 7, 2659-2668. | 14.6 | 88 |
| 205 | Behaviors of Fe, Zn, and Ga Substitution in CulnS ₂ Nanoparticles Probed with Anomalous X-ray Diffraction. Chemistry of Materials, 2013, 25, 320-325. | 6.7 | 19 |
| 206 | Effects of Confinement on Microstructure and Charge Transport in High Performance Semicrystalline Polymer Semiconductors. Advanced Functional Materials, 2013, 23, 2091-2098. | 14.9 | 77 |
| 207 | Can Polymorphism be Used to form Branched Metal Nanostructures?. Advanced Materials, 2013, 25, 1552-1556. | 21.0 | 72 |
| 208 | The chemical and structural origin of efficient p-type doping in P3HT. Organic Electronics, 2013, 14, 1330-1336. | 2.6 | 256 |
| 209 | The Importance of Fullerene Percolation in the Mixed Regions of Polymer–Fullerene Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2013, 3, 364-374. | 19.5 | 412 |
| 210 | Heavy-Enzyme Kinetic Isotope Effects on Proton Transfer in Alanine Racemase. Journal of the American Chemical Society, 2013, 135, 2509-2511. | 13.7 | 44 |
| 211 | Two-Dimensional GIWAXS Reveals a Transient Crystal Phase in Solution-Processed Thermally Converted Tetrabenzoporphyrin. Journal of Physical Chemistry B, 2013, 117, 14557-14567. | 2.6 | 21 |
| 212 | Common Enzymological Experiments Allow Free Energy Profile Determination. Biochemistry, 2013, 52, 5952-5965. | 2.5 | 15 |
| 213 | Cross-Linked Ultrathin Polyurea Films via Molecular Layer Deposition. Macromolecules, 2013, 46, 5638-5643. | 4.8 | 49 |
| 214 | Ultrathin Body Poly(3-hexylthiophene) Transistors with Improved Short-Channel Performance. ACS Applied Materials & Samp; Interfaces, 2013, 5, 2342-2346. | 8.0 | 27 |
| 215 | Synthesis, solidâ€state, and chargeâ€transport properties of conjugated polythiopheneâ€ <i>S</i> , <i>S</i> ,â€dioxides. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 48-56. | 2.1 | 22 |
| 216 | Vertically Segregated Structure and Properties of Small Molecule–Polymer Blend Semiconductors for Organic Thinâ€Film Transistors. Advanced Functional Materials, 2013, 23, 366-376. | 14.9 | 106 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 217 | Identifying and managing radiation damage during in situ transmission x-ray microscopy of Li-ion batteries. Proceedings of SPIE, 2013 , , . | 0.8 | 28 |
| 218 | Structural and Rheological Properties of Meibomian Lipid. , 2013, 54, 2720. | | 63 |
| 219 | Evolution of nanoscale roughness in Cu/SiO2 and Cu/Ta interfaces. Applied Physics Letters, 2012, 100, 024106. | 3.3 | 7 |
| 220 | Mitigating residual stress in Cu metallization. Applied Physics Letters, 2012, 101, 231906. | 3.3 | 4 |
| 221 | Effect of sintering conditions on mixed ionic-electronic conducting properties of silver sulfide nanoparticles. Journal of Applied Physics, 2012, 111, 053530. | 2.5 | 3 |
| 222 | Understanding stress gradients in microelectronic metallization. Powder Diffraction, 2012, 27, 92-98. | 0.2 | 3 |
| 223 | Electron mean free path of tungsten and the electrical resistivity of epitaxial (110) tungsten films. Physical Review B, 2012, 86, . | 3.2 | 79 |
| 224 | Temperature-Induced Transitions in the Structure and Interfacial Rheology of Human Meibum. Biophysical Journal, 2012, 102, 369-376. | 0.5 | 51 |
| 225 | 5,11-Conjugation-extended low-bandgap anthradithiophene-containing polymer exhibiting enhanced thin-film order and field-effect mobility. Chemical Communications, 2012, 48, 7286. | 4.1 | 16 |
| 226 | Time-Resolved Structural Evolution of Additive-Processed Bulk Heterojunction Solar Cells. Journal of the American Chemical Society, 2012, 134, 2884-2887. | 13.7 | 125 |
| 227 | A Quantitative Correlation between the Mobility and Crystallinity of Photo-Cross-Linkable P3HT. Macromolecules, 2012, 45, 3057-3062. | 4.8 | 46 |
| 228 | The Crystalline Structure of Copper Phthalocyanine Films on ZnO(11i00). Journal of the American Chemical Society, 2012, 134, 14302-14305. | 13.7 | 27 |
| 229 | Chemical Annealing of Zinc Tetraphenylporphyrin Films: Effects on Film Morphology and Organic Photovoltaic Performance. Chemistry of Materials, 2012, 24, 2583-2591. | 6.7 | 24 |
| 230 | <i>In Situ</i> X-ray Diffraction Studies of (De)lithiation Mechanism in Silicon Nanowire Anodes. ACS Nano, 2012, 6, 5465-5473. | 14.6 | 156 |
| 231 | Quantitative Determination of Organic Semiconductor Microstructure from the Molecular to Device Scale. Chemical Reviews, 2012, 112, 5488-5519. | 47.7 | 1,133 |
| 232 | High-Capacity Micrometer-Sized Li ₂ S Particles as Cathode Materials for Advanced Rechargeable Lithium-Ion Batteries. Journal of the American Chemical Society, 2012, 134, 15387-15394. | 13.7 | 624 |
| 233 | Impact of regioregularity on thin-film transistor and photovoltaic cell performances of pentacene-containing polymers. Journal of Materials Chemistry, 2012, 22, 4356. | 6.7 | 14 |
| 234 | Use of Xâ€Ray Diffraction, Molecular Simulations, and Spectroscopy to Determine the Molecular Packing in a Polymerâ€Fullerene Bimolecular Crystal. Advanced Materials, 2012, 24, 6071-6079. | 21.0 | 126 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 235 | Factors Governing Intercalation of Fullerenes and Other Small Molecules Between the Side Chains of Semiconducting Polymers Used in Solar Cells. Advanced Energy Materials, 2012, 2, 1208-1217. | 19.5 | 97 |
| 236 | Narrow-Band-Gap Conjugated Chromophores with Extended Molecular Lengths. Journal of the American Chemical Society, 2012, 134, 20609-20612. | 13.7 | 128 |
| 237 | Angle-resolved photoemission and quasiparticle calculation of ZnO: The need for <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>d</mml:mi>d</mml:math> band shift in oxide semiconductors. Physical Review B. 2012. 86 | 3.2 | 56 |
| 238 | Poly(3-hexylthiophene) and [6,6]-Phenyl-C ₆₁ -butyric Acid Methyl Ester Mixing in Organic Solar Cells. Macromolecules, 2012, 45, 6587-6599. | 4.8 | 103 |
| 239 | Synthesis, Alignment, and Magnetic Properties of Monodisperse Nickel Nanocubes. Journal of the American Chemical Society, 2012, 134, 855-858. | 13.7 | 141 |
| 240 | Role of confinement and aggregation in charge transport in semicrystalline polythiophene thin films. Physical Review B, 2012, 86, . | 3.2 | 100 |
| 241 | A simple droplet pinning method for polymer film deposition for measuring charge transport in a thin film transistor. Organic Electronics, 2012, 13, 2450-2460. | 2.6 | 43 |
| 242 | Manipulating the Morphology of P3HT–PCBM Bulk Heterojunction Blends with Solvent Vapor Annealing. Chemistry of Materials, 2012, 24, 3923-3931. | 6.7 | 171 |
| 243 | Molecular Packing and Solar Cell Performance in Blends of Polymers with a Bisadduct Fullerene. Nano Letters, 2012, 12, 1566-1570. | 9.1 | 140 |
| 244 | Controlling spin ordering in frustrated magnets via thin film heteroepitaxy. Physical Review B, 2012, 85, . | 3.2 | 7 |
| 245 | Side-Chain Tunability of Furan-Containing Low-Band-Gap Polymers Provides Control of Structural Order in Efficient Solar Cells. Journal of the American Chemical Society, 2012, 134, 2180-2185. | 13.7 | 458 |
| 246 | In Operando X-ray Diffraction and Transmission X-ray Microscopy of Lithium Sulfur Batteries. Journal of the American Chemical Society, 2012, 134, 6337-6343. | 13.7 | 475 |
| 247 | Molecular Structure of Interfacial Human Meibum Films. Langmuir, 2012, 28, 11858-11865. | 3.5 | 42 |
| 248 | Three-Dimensional Packing Structure and Electronic Properties of Biaxially Oriented Poly(2,5-bis(3-alkylthiophene-2-yl)thieno[3,2- <i>b</i>)thiophene) Films. Journal of the American Chemical Society, 2012, 134, 6177-6190. | 13.7 | 108 |
| 249 | Measuring Domain Sizes and Compositional Heterogeneities in P3HTâ€PCBM Bulk Heterojunction Thin Films with ¹ H Spin Diffusion NMR Spectroscopy. Advanced Functional Materials, 2012, 22, 1255-1266. | 14.9 | 47 |
| 250 | Reticulated Organic Photovoltaics. Advanced Functional Materials, 2012, 22, 1167-1173. | 14.9 | 13 |
| 251 | A Supramolecular Complex in Smallâ€Molecule Solar Cells based on Contorted Aromatic Molecules. Angewandte Chemie - International Edition, 2012, 51, 8594-8597. | 13.8 | 82 |
| 252 | Growth Trajectories and Coarsening Mechanisms of Metal Nanoparticle Electrocatalysts. ChemCatChem, 2012, 4, 766-770. | 3.7 | 27 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 253 | Co3O4–Co2ZnO4 spinels: The case for a solid solution. Journal of Solid State Chemistry, 2012, 190, 143-149. | 2.9 | 15 |
| 254 | Fabrication of organic semiconductor crystalline thin films and crystals from solution by confined crystallization. Organic Electronics, 2012, 13, 235-243. | 2.6 | 34 |
| 255 | Probing the effect of substrate heating during deposition of DCV4T:C60 blend layers for organic solar cells. Organic Electronics, 2012, 13, 623-631. | 2.6 | 22 |
| 256 | Synthesis of regioregular pentacene-containing conjugated polymers. Journal of Materials Chemistry, 2011, 21, 7078. | 6.7 | 19 |
| 257 | In situ measurement of power conversion efficiency and molecular ordering during thermal annealing in P3HT:PCBM bulk heterojunction solar cells. Journal of Materials Chemistry, 2011, 21, 15224. | 6.7 | 84 |
| 258 | Controlling the Microstructure of Solution-Processable Small Molecules in Thin-Film Transistors through Substrate Chemistry. Chemistry of Materials, 2011, 23, 1194-1203. | 6.7 | 67 |
| 259 | Mechanistic Studies on Sintering of Silver Nanoparticles. Chemistry of Materials, 2011, 23, 4634-4640. | 6.7 | 77 |
| 260 | Nonequilibrium 2-Hydroxyoctadecanoic Acid Monolayers: Effect of Electrolytes. Langmuir, 2011, 27, 4430-4438. | 3.5 | 8 |
| 261 | Dealloying of Cu ₃ Pt (111) Studied by Surface X-ray Scattering. Journal of Physical Chemistry C, 2011, 115, 9074-9080. | 3.1 | 65 |
| 262 | A modular molecular framework for utility in small-molecule solution-processed organic photovoltaic devices. Journal of Materials Chemistry, 2011, 21, 12700. | 6.7 | 175 |
| 263 | Drastic Control of Texture in a High Performance n-Type Polymeric Semiconductor and Implications for Charge Transport. Macromolecules, 2011, 44, 5246-5255. | 4.8 | 278 |
| 264 | Structure and Mechanism of Strength Enhancement in Interpenetrating Polymer Network Hydrogels. Macromolecules, 2011, 44, 5776-5787. | 4.8 | 100 |
| 265 | Side chain engineering of fused aromatic thienopyrazine based low band-gap polymers for enhanced charge carrier mobility. Journal of Materials Chemistry, 2011, 21, 1537-1543. | 6.7 | 30 |
| 266 | Siloxane-Terminated Solubilizing Side Chains: Bringing Conjugated Polymer Backbones Closer and Boosting Hole Mobilities in Thin-Film Transistors. Journal of the American Chemical Society, 2011, 133, 20130-20133. | 13.7 | 628 |
| 267 | Insertion Mechanism of a Poly(ethylene oxide)-poly(butylene oxide) Block Copolymer into a DPPC Monolayer. Langmuir, 2011, 27, 11444-11450. | 3.5 | 23 |
| 268 | Influence of Surfactant Structure on Reverse Micelle Size and Charge for Nonpolar Electrophoretic Inks. Langmuir, 2011, 27, 11845-11851. | 3.5 | 62 |
| 269 | Tuning charge transport in solution-sheared organic semiconductors using lattice strain. Nature, 2011, 480, 504-508. | 27.8 | 981 |
| 270 | Zone-Refinement Effect in Small Moleculeâ^'Polymer Blend Semiconductors for Organic Thin-Film Transistors. Journal of the American Chemical Society, 2011, 133, 412-415. | 13.7 | 59 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 271 | Molecular Packing of High-Mobility Diketo Pyrrolo-Pyrrole Polymer Semiconductors with Branched Alkyl Side Chains. Journal of the American Chemical Society, 2011, 133, 15073-15084. | 13.7 | 381 |
| 272 | How Nanoparticles Coalesce: An in Situ Study of Au Nanoparticle Aggregation and Grain Growth. Chemistry of Materials, 2011, 23, 3312-3317. | 6.7 | 174 |
| 273 | 3,4-Disubstituted Polyalkylthiophenes for High-Performance Thin-Film Transistors and Photovoltaics. Journal of the American Chemical Society, 2011, 133, 16722-16725. | 13.7 | 67 |
| 274 | Controlling reaction specificity in pyridoxal phosphate enzymes. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 1407-1418. | 2.3 | 145 |
| 275 | Real-Time Observation of Poly(3-alkylthiophene) Crystallization and Correlation with Transient Optoelectronic Properties. Macromolecules, 2011, 44, 6653-6658. | 4.8 | 99 |
| 276 | Structural origin of gap states in semicrystalline polymers and the implications for charge transport. Physical Review B, 2011, 83, . | 3.2 | 180 |
| 277 | Quantitative analysis of lattice disorder and crystallite size in organic semiconductor thin films. Physical Review B, 2011, 84, . | 3.2 | 262 |
| 278 | Modular construction of P3HT/PCBM planar-heterojunction solar cells by lamination allows elucidation of processing–structure–function relationships. Organic Electronics, 2011, 12, 1963-1972. | 2.6 | 18 |
| 279 | Observation of Transient Structural-Transformation Dynamics in a Cu ₂ S Nanorod. Science, 2011, 333, 206-209. | 12.6 | 220 |
| 280 | Molecular Order in High-Efficiency Polymer/Fullerene Bulk Heterojunction Solar Cells. ACS Nano, 2011, 5, 8248-8257. | 14.6 | 260 |
| 281 | SAXSMorph: a program for generating representative morphologies for two-phase materials from small-angle X-ray and neutron scattering data. Journal of Applied Crystallography, 2011, 44, 221-224. | 4.5 | 9 |
| 282 | The phase behavior of a polymerâ€fullerene bulk heterojunction system that contains bimolecular crystals. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 499-503. | 2.1 | 71 |
| 283 | Effects of Thermal Annealing Upon the Nanomorphology of Poly(3â€hexylselenophene)â€PCBM Blends. Macromolecular Rapid Communications, 2011, 32, 1454-1460. | 3.9 | 17 |
| 284 | In Situ Observation of Strain Development and Porosity Evolution in Nanoporous Gold Foils. Advanced Functional Materials, 2011, 21, 3938-3946. | 14.9 | 60 |
| 285 | Anisotropic Structure and Charge Transport in Highly Strainâ€Aligned Regioregular Poly(3â€hexylthiophene). Advanced Functional Materials, 2011, 21, 3697-3705. | 14.9 | 288 |
| 286 | Molecular Characterization of Organic Electronic Films. Advanced Materials, 2011, 23, 319-337. | 21.0 | 215 |
| 287 | Structural Order in Bulk Heterojunction Films Prepared with Solvent Additives. Advanced Materials, 2011, 23, 2284-2288. | 21.0 | 248 |
| 288 | Solutionâ€Processed Nanostructured Benzoporphyrin with Polycarbonate Binder for Photovoltaics. Advanced Materials, 2011, 23, 2289-2293. | 21.0 | 38 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 289 | Interdiffusion of PCBM and P3HT Reveals Miscibility in a Photovoltaically Active Blend. Advanced Energy Materials, 2011, 1, 82-89. | 19.5 | 572 |
| 290 | Morphologyâ€Dependent Trap Formation in High Performance Polymer Bulk Heterojunction Solar Cells. Advanced Energy Materials, 2011, 1, 954-962. | 19.5 | 183 |
| 291 | Simple Synthesis and Functionalization of Iron Nanoparticles for Magnetic Resonance Imaging. Angewandte Chemie - International Edition, 2011, 50, 4206-4209. | 13.8 | 148 |
| 292 | Influence of substrate on crystallization in polythiophene/fullerene blends. Solar Energy Materials and Solar Cells, 2011, 95, 1375-1381. | 6.2 | 42 |
| 293 | xmins:mmi= http://www.w3.org/1998/Math/MathML display= inline > <mml:msub> <mml:mrow></mml:mrow> <mml:mn>2 </mml:mn> </mml:msub> ZnO <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:msub> <mml:mrow></mml:mrow> <mml:mn> 4 </mml:mn> </mml:msub> </mml:math> and Rh <mml:math< td=""><td>3.2</td><td>25</td></mml:math<> | 3.2 | 25 |
| 294 | Phase, grain structure, stress, and resistivity of sputter-deposited tungsten films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, . | 2.1 | 93 |
| 295 | Correlating the scattered intensities of P3HT and PCBM to the current densities of polymer solar cells. Chemical Communications, 2011, 47, 436-438. | 4.1 | 103 |
| 296 | High efficiency amine functionalization of cycloolefin polymer surfaces for biodiagnostics. Journal of Materials Chemistry, 2010, 20, 4116. | 6.7 | 51 |
| 297 | Surface and grain-boundary scattering in nanometric Cu films. Physical Review B, 2010, 81, . | 3.2 | 172 |
| 298 | Photovoltaic Universal Joints: Ballâ€andâ€Socket Interfaces in Molecular Photovoltaic Cells. ChemPhysChem, 2010, 11, 799-803. | 2.1 | 74 |
| 299 | Effects of Thermal Annealing Upon the Morphology of Polymer–Fullerene Blends. Advanced Functional Materials, 2010, 20, 3519-3529. | 14.9 | 539 |
| 300 | Unconventional Faceâ€On Texture and Exceptional Inâ€Plane Order of a High Mobility nâ€Type Polymer. Advanced Materials, 2010, 22, 4359-4363. | 21.0 | 344 |
| 301 | Structural properties of epitaxial SrHfO3 thin films on Si (001). Thin Solid Films, 2010, 518, S118-S122. | 1.8 | 24 |
| 302 | Lattice-strain control of the activity in dealloyed core–shell fuel cell catalysts. Nature Chemistry, 2010, 2, 454-460. | 13.6 | 2,489 |
| 303 | In situevolution of stress gradients in Cu films induced by capping layers. Applied Physics Letters, 2010, 96, 261903. | 3.3 | 5 |
| 304 | Organic Solar Cells: How X-ray Scattering Has Improved Our Understanding of Morphology. Synchrotron Radiation News, 2010, 23, 16-21. | 0.8 | 7 |
| 305 | Interfacial Segregation in Polymer/Fullerene Blend Films for Photovoltaic Devices. Macromolecules, 2010, 43, 3828-3836. | 4.8 | 182 |
| 306 | Morphology of Photopolymerized End-Linked Poly(ethylene glycol) Hydrogels by Small-Angle X-ray Scattering. Macromolecules, 2010, 43, 6861-6870. | 4.8 | 87 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 307 | Small-Molecule Thiophene-C ₆₀ Dyads As Compatibilizers in Inverted Polymer Solar Cells. Chemistry of Materials, 2010, 22, 5762-5773. | 6.7 | 68 |
| 308 | Synthesis and Characterization of K _{8â^'<i>x</i>} (H ₂) _{<i>y</i>} Si ₄₆ . Inorganic Chemistry, 2010, 49, 815-822. | 4.0 | 28 |
| 309 | Reversible Soft-Contact Lamination and Delamination for Non-Invasive Fabrication and Characterization of Bulk-Heterojunction and Bilayer Organic Solar Cells. Chemistry of Materials, 2010, 22, 4931-4938. | 6.7 | 45 |
| 310 | Synthesis, Properties, and Electronic Applications of Size-Controlled Poly(3-hexylthiophene) Nanoparticles. Langmuir, 2010, 26, 13056-13061. | 3.5 | 95 |
| 311 | Structure of Dealloyed PtCu3Thin Films and Catalytic Activity for Oxygen Reduction. Chemistry of Materials, 2010, 22, 4712-4720. | 6.7 | 173 |
| 312 | Thiophene-rich fused-aromatic thienopyrazine acceptor for donor–acceptor low band-gap polymers for OTFT and polymer solar cell applications. Journal of Materials Chemistry, 2010, 20, 5823. | 6.7 | 84 |
| 313 | Device-Scale Perpendicular Alignment of Colloidal Nanorods. Nano Letters, 2010, 10, 195-201. | 9.1 | 241 |
| 314 | Quantification of Thin Film Crystallographic Orientation Using X-ray Diffraction with an Area Detector. Langmuir, 2010, 26, 9146-9151. | 3.5 | 315 |
| 315 | Ultrafast Growth of Highly Branched Palladium Nanostructures for Catalysis. ACS Nano, 2010, 4, 396-402. | 14.6 | 194 |
| 316 | Laser-Synthesized Epitaxial Graphene. ACS Nano, 2010, 4, 7524-7530. | 14.6 | 79 |
| 317 | Relating microstructure to transport in organic semiconductor transistors. , 2009, , . | | 0 |
| 318 | Bimolecular Crystals of Fullerenes in Conjugated Polymers and the Implications of Molecular Mixing for Solar Cells. Advanced Functional Materials, 2009, 19, 1173-1179. | 14.9 | 392 |
| 319 | The Role of OTS Density on Pentacene and C ₆₀ Nucleation, Thin Film Growth, and Transistor Performance. Advanced Functional Materials, 2009, 19, 1962-1970. | 14.9 | 227 |
| 320 | Solidâ€State Supramolecular Organization of Polythiophene Chains Containing Thienothiophene Units. Advanced Materials, 2009, 21, 1193-1198. | 21.0 | 76 |
| 321 | Chargeâ€Transport Anisotropy Due to Grain Boundaries in Directionally Crystallized Thin Films of Regioregular Poly(3â€hexylthiophene). Advanced Materials, 2009, 21, 1568-1572. | 21.0 | 305 |
| 322 | Precise Structure of Pentacene Monolayers on Amorphous Silicon Oxide and Relation to Charge Transport. Advanced Materials, 2009, 21, 2294-2298. | 21.0 | 183 |
| 323 | Controlling Nucleation and Crystallization in Solutionâ€Processed Organic Semiconductors for Thinâ€Film Transistors. Advanced Materials, 2009, 21, 3605-3609. | 21.0 | 141 |
| 324 | Large modulation of carrier transport by grain-boundary molecular packing and microstructure in organic thin films. Nature Materials, 2009, 8, 952-958. | 27.5 | 416 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 325 | In situ USAXS measurements of titania colloidal paint films during the drying process. Journal of Colloid and Interface Science, 2009, 336, 612-615. | 9.4 | 12 |
| 326 | Clipped Random Wave Morphologies and the Analysis of the SAXS of an lonomer Formed by Copolymerization of Tetrafluoroethylene and CF2â•CFO(CF2)4SO3H. Macromolecules, 2009, 42, 5774-5780. | 4.8 | 25 |
| 327 | Improved Efficiency in Poly(3-hexylthiophene)/Zinc Oxide Solar Cells via Lithium Incorporation. Journal of Physical Chemistry C, 2009, 113, 17608-17612. | 3.1 | 21 |
| 328 | Influence of Interfacial Layer Between Nanoparticles and Polymeric Matrix on Viscoelastic Properties of Hydrogel Nanocomposites. Macromolecules, 2009, 42, 1331-1343. | 4.8 | 10 |
| 329 | Solution-Processable $\hat{l}\pm$,i‰-Distyryl Oligothiophene Semiconductors with Enhanced Environmental Stability. Chemistry of Materials, 2009, 21, 1927-1938. | 6.7 | 29 |
| 330 | Controlling the Orientation of Terraced Nanoscale "Ribbons―of a Poly(thiophene) Semiconductor. ACS Nano, 2009, 3, 780-787. | 14.6 | 160 |
| 331 | Molecular design for improved photovoltaic efficiency: band gap and absorption coefficient engineering. Journal of Materials Chemistry, 2009, 19, 7195. | 6.7 | 72 |
| 332 | Crystalline Ultrasmooth Self-Assembled Monolayers of Alkylsilanes for Organic Field-Effect Transistors. Journal of the American Chemical Society, 2009, 131, 9396-9404. | 13.7 | 562 |
| 333 | In Situ and Ex Situ Studies of Platinum Nanocrystals: Growth and Evolution in Solution. Journal of the American Chemical Society, 2009, 131, 14590-14595. | 13.7 | 157 |
| 334 | Interplay between Energetic and Kinetic Factors on the Ambient Stability of n-Channel Organic Transistors Based on Perylene Diimide Derivatives. Chemistry of Materials, 2009, 21, 5508-5518. | 6.7 | 84 |
| 335 | Tuning the Properties of Polymer Bulk Heterojunction Solar Cells by Adjusting Fullerene Size to Control Intercalation. Nano Letters, 2009, 9, 4153-4157. | 9.1 | 243 |
| 336 | Dominant role of grain boundary scattering in the resistivity of nanometric Cu films. Physical Review B, 2009, 79, . | 3.2 | 98 |
| 337 | Preparation of crystalline dielectric modification silane layer by spin-coating and its improvements on organic transistor performance. Proceedings of SPIE, 2009, , . | 0.8 | 2 |
| 338 | A crystalline alkylsilane dielectric surface-modification layer: a general strategy for high performance organic thin-film transistors. Proceedings of SPIE, 2009, , . | 0.8 | 0 |
| 339 | Langmuir Monolayers of Straight-Chain and Branched Hexadecanol and Eicosanol Mixtures. Langmuir, 2008, 24, 14005-14014. | 3.5 | 15 |
| 340 | Correlation between luminescent properties and local coordination environment for erbium dopant in yttrium oxide nanotubes. Journal of Applied Physics, 2008, 103, 094316. | 2.5 | 11 |
| 341 | Microstructure of Oligofluorene Asymmetric Derivatives in Organic Thin Film Transistors. Chemistry of Materials, 2008, 20, 2763-2772. | 6.7 | 35 |
| 342 | Molecular Basis of Mesophase Ordering in a Thiophene-Based Copolymer. Macromolecules, 2008, 41, 5709-5715. | 4.8 | 114 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 343 | Square Grains in Asymmetric Rodâ^'Coil Block Copolymers. Langmuir, 2008, 24, 1604-1607. | 3.5 | 15 |
| 344 | In Situ Synchrotron X-ray Diffraction Experiments on Electrochemically Deposited ZnO Nanostructures. Journal of Physical Chemistry C, 2008, 112, 14863-14866. | 3.1 | 12 |
| 345 | Crystalline Structure in Thin Films of DEHâ^PPV Homopolymer and PPV-b-PI Rodâ^Coil Block Copolymers. Macromolecules, 2008, 41, 58-66. | 4.8 | 42 |
| 346 | The Influence of Poly(3-hexylthiophene) Regioregularity on Fullerene-Composite Solar Cell Performance. Journal of the American Chemical Society, 2008, 130, 16324-16329. | 13.7 | 394 |
| 347 | Thin Film Structure of Tetraceno[2,3- <i>b</i> jthiophene Characterized by Grazing Incidence X-ray Scattering and Near-Edge X-ray Absorption Fine Structure Analysis. Journal of the American Chemical Society, 2008, 130, 3502-3508. | 13.7 | 65 |
| 348 | The Impact of the Dielectric/Semiconductor Interface on Microstructure and Charge Carrier Transport in High-Performance Polythiophene Transistors. ECS Transactions, 2008, 13, 113-122. | 0.5 | 2 |
| 349 | Interfacial effects in thin films of polymeric semiconductors. Journal of Vacuum Science & Technology B, 2008, 26, 1454. | 1.3 | 6 |
| 350 | Strain development in nanoporous metallic foils formed by dealloying. Applied Physics Letters, 2008, 92, . | 3.3 | 40 |
| 351 | Correlating the microstructure of thin films of poly[5,5-bis(3-dodecyl-2-thienyl)-2,2-bithiophene] with charge transport: Effect of dielectric surface energy and thermal annealing. Physical Review B, 2008, 78, . | 3.2 | 74 |
| 352 | Particle size effect of hydrogen-induced lattice expansion of palladium nanoclusters. Physical Review B, 2008, 78, . | 3.2 | 78 |
| 353 | Size and composition distribution dynamics of alloy nanoparticle electrocatalysts probed by anomalous small angle X-ray scattering (ASAXS). Faraday Discussions, 2008, 140, 283-296. | 3.2 | 71 |
| 354 | Structural properties of epitaxial \hat{I}^3 -Al2O3 (111) thin films on 4H-SiC (0001). Applied Physics Letters, 2007, 90, 061916. | 3.3 | 15 |
| 355 | Engineering epitaxial Î ³ -Al2O3 gate dielectric films on 4H-SiC. Journal of Applied Physics, 2007, 102, 104112. | 2.5 | 21 |
| 356 | Effects of the surface roughness of plastic-compatible inorganic dielectrics on polymeric thin film transistors. Applied Physics Letters, 2007, 90, 233508. | 3.3 | 66 |
| 357 | Structure-Activity-Stability Relationships of Ptâ°Co Alloy Electrocatalysts in Gas-Diffusion Electrode Layers. Journal of Physical Chemistry C, 2007, 111, 3744-3752. | 3.1 | 188 |
| 358 | Thin Film Transistors Based on Alkylphenyl Quaterthiophenes:Â Structure and Electrical Transport Properties. Chemistry of Materials, 2007, 19, 1355-1361. | 6.7 | 23 |
| 359 | Enrichment of Deuterium Oxide at Hydrophilic Interfaces in Aqueous Solutions. Langmuir, 2007, 23, 11943-11946. | 3.5 | 2 |
| 360 | Activity–stability relationships of ordered and disordered alloy phases of Pt3Co electrocatalysts for the oxygen reduction reaction (ORR). Electrochimica Acta, 2007, 52, 2765-2774. | 5.2 | 159 |

| # | Article | IF | Citations |
|-----|---|------|-----------|
| 361 | Critical Role of Side-Chain Attachment Density on the Order and Device Performance of Polythiophenes. Macromolecules, 2007, 40, 7960-7965. | 4.8 | 321 |
| 362 | X-ray Scattering Study of Thin Films of Poly(2,5-bis(3-alkylthiophen-2-yl)thieno[3,2-b]thiophene). Journal of the American Chemical Society, 2007, 129, 3226-3237. | 13.7 | 351 |
| 363 | Significant dependence of morphology and charge carrier mobility on substrate surface chemistry in high performance polythiophene semiconductor films. Applied Physics Letters, 2007, 90, 062117. | 3.3 | 136 |
| 364 | Microstructural effects on the performance of poly(thiophene) field-effect transistors., 2006, 6336, 41. | | 2 |
| 365 | Highly oriented crystals at the buried interface in polythiophene thin-film transistors. Nature Materials, 2006, 5, 222-228. | 27.5 | 737 |
| 366 | Liquid-crystalline semiconducting polymers with high charge-carrier mobility. Nature Materials, 2006, 5, 328-333. | 27.5 | 2,001 |
| 367 | Structural effect of PtRu–WO3 alloy nanostructures on methanol electrooxidation. Electrochemistry Communications, 2006, 8, 359-363. | 4.7 | 23 |
| 368 | Microstructural origin of orientation ratio in magnetic recording media. Journal of Applied Physics, 2006, 99, 033907. | 2.5 | 3 |
| 369 | Applications of synchrotron X-rays in microelectronics industry research. Nuclear Instruments & Methods in Physics Research B, 2005, 241, 247-252. | 1.4 | 3 |
| 370 | Electrochemical and electrochromic properties of nanoworm-shaped Ta2O5–Pt thin-films. Electrochemistry Communications, 2005, 7, 151-155. | 4.7 | 12 |
| 371 | Dependence of Regioregular Poly(3-hexylthiophene) Film Morphology and Field-Effect Mobility on Molecular Weight. Macromolecules, 2005, 38, 3312-3319. | 4.8 | 1,003 |
| 372 | Magnetization profile in antiferromagnetically coupled recording media. Applied Physics Letters, 2005, 86, 162506. | 3.3 | 5 |
| 373 | Coverage effects on the magnetism of Feâ^•MgO (001) ultrathin films. Physical Review B, 2005, 71, . | 3.2 | 50 |
| 374 | Highly Regioselective Oneâ€Pot Synthesis of 7â€Hydroxyâ€6â€methylphthalide from 3â€Hydroxyâ€4â€methylbenzylalcohol. Synthetic Communications, 2005, 35, 2869-2874. | 2.1 | 2 |
| 375 | p-Channel Organic Semiconductors Based on Hybrid Aceneâ^'Thiophene Molecules for Thin-Film Transistor Applications. Journal of the American Chemical Society, 2005, 127, 3997-4009. | 13.7 | 204 |
| 376 | Structure and Electrocatalysis of Sputtered RuPt Thin-Film Electrodes. Journal of Physical Chemistry B, 2005, 109, 12845-12849. | 2.6 | 11 |
| 377 | Local Atomic Structure of Partially Ordered NiMn in NiMn/NiFe Exchange Coupled Layers:Â 1. XAFS Measurements and Structural Refinement. Journal of Physical Chemistry B, 2005, 109, 10406-10418. | 2.6 | 9 |
| 378 | Reaction specificity in pyridoxal phosphate enzymes. Archives of Biochemistry and Biophysics, 2005, 433, 279-287. | 3.0 | 246 |

| # | Article | IF | Citations |
|-----|--|------|-----------|
| 379 | Stoichiometry–anisotropy connections in epitaxial L10 FePt(001) films. Journal of Applied Physics, 2004, 95, 7501-7503. | 2.5 | 34 |
| 380 | Origin of low-friction behavior in graphite investigated by surface x-ray diffraction. Applied Physics Letters, 2004, 84, 4702-4704. | 3.3 | 83 |
| 381 | Pore Morphologies in Disordered Nanoporous Thin Films. Langmuir, 2004, 20, 1535-1538. | 3.5 | 17 |
| 382 | Structural Characterization of a Pentacene Monolayer on an Amorphous SiO2Substrate with Grazing Incidence X-ray Diffraction. Journal of the American Chemical Society, 2004, 126, 4084-4085. | 13.7 | 412 |
| 383 | Reduction of resistivity in Cu thin films by partial oxidation: Microstructural mechanisms. Applied Physics Letters, 2004, 84, 2518-2520. | 3.3 | 10 |
| 384 | Thickness and growth temperature dependence of structure and magnetism in FePt thin films. Journal of Applied Physics, 2003, 93, 9902-9907. | 2.5 | 100 |
| 385 | Microstructure and properties of ultrathin amorphous silicon nitride protective coating. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1895-1904. | 2.1 | 40 |
| 386 | High anisotropy CoPtCrB magnetic recording media. Journal of Applied Physics, 2003, 94, 4018-4023. | 2.5 | 17 |
| 387 | Thickness dependence of exchange bias and structure in MnPt and MnNi spin valves. Applied Physics Letters, 2002, 81, 4565-4567. | 3.3 | 39 |
| 388 | Computational Studies on Nonenzymatic and Enzymatic Pyridoxal Phosphate Catalyzed Decarboxylations of 2-Aminoisobutyrateâ€. Biochemistry, 2001, 40, 1378-1384. | 2.5 | 36 |
| 389 | Thickness Measurements of Thin Perfluoropolyether Polymer Films on Silicon and Amorphous-Hydrogenated Carbon with X-Ray Reflectivity, ESCA and Optical Ellipsometry. Journal of Colloid and Interface Science, 2000, 225, 219-226. | 9.4 | 47 |
| 390 | The Structure of the Passive Film That Forms on Iron in Aqueous Environments. Journal of the Electrochemical Society, 2000, 147, 2162. | 2.9 | 232 |
| 391 | Distribution of water molecules at $Ag(111)/e$ lectrolyte interface as studied with surface X-ray scattering. Surface Science, 1995, 335, 326-332. | 1.9 | 167 |
| 392 | Electrochemical Deposition of Copper on a Gold Electrode in Sulfuric Acid: Resolution of the Interfacial Structure. Physical Review Letters, 1995, 75, 4472-4475. | 7.8 | 213 |
| 393 | Comment on   Superstructures of Pb monolayers electrochemically deposited on Ag(111)''. Physical Review B, 1994, 49, 7793-7794. | 3.2 | 19 |
| 394 | Voltage-dependent ordering of water molecules at an electrode–electrolyte interface. Nature, 1994, 368, 444-446. | 27.8 | 566 |
| 395 | X-ray diffraction from anodic TiO2 films: in situ and ex situ comparison of the Ti (0001) face. Surface Science, 1994, 302, 341-349. | 1.9 | 9 |
| 396 | Near-surface structure of aromatic polyimides: the effect of precursor isomers. Faraday Discussions, 1994, 98, 319. | 3.2 | 2 |

| # | Article | IF | CITATIONS |
|-----|---|------|-----------|
| 397 | Underpotentially deposited thallium on silver (111) byin situsurface x-ray scattering. Physical Review B, 1992, 45, 9362-9374. | 3.2 | 73 |
| 398 | Structure and epitaxy of anodic TiO2/Ti(110). Surface Science, 1992, 268, 57-72. | 1.9 | 16 |
| 399 | Thermal annealing study of exchangeâ€biased NiFeâ€FeMn films. Journal of Applied Physics, 1991, 70, 6227-6229. | 2.5 | 46 |
| 400 | Surface x-ray-scattering measurements of the substrate-induced spatial modulation of an incommensurate adsorbed monolayer. Physical Review B, 1990, 42, 5594-5603. | 3.2 | 66 |
| 401 | Structural depth profiling of iron oxide thin films using grazing incidence asymmetric Bragg xâ€ r ay diffraction. Journal of Applied Physics, 1989, 65, 4763-4768. | 2.5 | 29 |
| 402 | Measurements of carbon thin films using xâ€ray reflectivity. Journal of Applied Physics, 1989, 66, 1861-1863. | 2.5 | 72 |
| 403 | Observation of the effect of refraction on x rays diffracted in a grazing-incidence asymmetric Bragg geometry. Physical Review B, 1989, 39, 7963-7966. | 3.2 | 80 |
| 404 | In-situ grazing incidence X-ray diffraction study of electrochemically deposited Pb monolayers on Ag(111). Surface Science, 1988, 193, L29-L36. | 1.9 | 102 |
| 405 | Low-energy electron diffraction study of molecular oxygen physisorbed on graphite. Physical Review B, 1987, 36, 1248-1258. | 3.2 | 62 |
| 406 | Low-energy electron diffraction determination of the structure of the ζphase of oxygen physisorbed on graphite. Physical Review B, 1984, 30, 1115-1118. | 3.2 | 48 |
| 407 | Rotational epitaxy of a nontriangular structure: Thel´phase of oxygen physisorbed on graphite. Physical Review B, 1983, 27, 6413-6417. | 3.2 | 57 |
| 408 | Orientational Ordering of Nitrogen Molecular Axes for a Commensurate Monolayer Physisorbed on Graphite. Physical Review Letters, 1982, 48, 177-180. | 7.8 | 130 |
| 409 | Multiple Hydrogen Transfers in Enzyme Action. , 0, , 1139-1170. | | O |
| 410 | Manipulation and statistical analysis of the fluid flow of polymer semiconductor solutions during meniscus-guided coating. MRS Bulletin, 0, , 1-14. | 3.5 | 0 |
| 411 | Twisted Aâ€Dâ€A Type Acceptors with Thermallyâ€Activated Delayed Crystallization Behavior for Efficient Nonfullerene Organic Solar Cells. Advanced Energy Materials, 0, , 2103957. | 19.5 | 6 |