

# Stefan A L Weber

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8642206/publications.pdf>

Version: 2024-02-01

61  
papers

2,890  
citations

186209

28  
h-index

168321

53  
g-index

64  
all docs

64  
docs citations

64  
times ranked

4461  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Charging of drops impacting onto superhydrophobic surfaces. <i>Soft Matter</i> , 2022, 18, 1628-1635.  | 1.2  | 12        |
| 2  | Martini 3 Model of Cellulose Microfibrils: On the Route to Capture Large Conformational Changes of Polysaccharides. <i>Molecules</i> , 2022, 27, 976.  | 1.7  | 7         |
| 3  | Spontaneous charging affects the motion of sliding drops. <i>Nature Physics</i> , 2022, 18, 713-719.   | 6.5  | 62        |
| 4  | Tuning the Charge of Sliding Water Drops. <i>Langmuir</i> , 2022, 38, 6224-6230.   | 1.6  | 10        |
| 5  | Fine Customization of Calcium Phosphate Nanostructures with Site-Specific Modification by DNA Templated Mineralization. <i>ACS Nano</i> , 2021, 15, 1555-1565.   | 7.3  | 29        |
| 6  | Two birds with one stone: dual grain-boundary and interface passivation enables >22% efficient inverted methylammonium-free perovskite solar cells. <i>Energy and Environmental Science</i> , 2021, 14, 5875-5893.   | 15.6 | 180       |
| 7  | Recent progress in atomic and molecular physics for controlled fusion and astrophysics. <i>Matter and Radiation at Extremes</i> , 2021, 6, 023002.   | 1.5  | 3         |
| 8  | On the Shape-Selected, Ligand-Free Preparation of Hybrid Perovskite (CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> ) Microcrystals and Their Suitability as Model-System for Single-Crystal Studies of Optoelectronic Properties. <i>Nanomaterials</i> , 2021, 11, 3057. | 1.9  | 3         |
| 9  | IM30 IDPs form a membrane-protective carpet upon super-complex disassembly. <i>Communications Biology</i> , 2020, 3, 595.  | 2.0  | 16        |
| 10 | Anisotropic carrier diffusion in single MAPbI <sub>3</sub> grains correlates to their twin domains. <i>Energy and Environmental Science</i> , 2020, 13, 4168-4177.   | 15.6 | 27        |
| 11 | Grafting Silicone at Room Temperature—a Transparent, Scratch-resistant Nonstick Molecular Coating. <i>Langmuir</i> , 2020, 36, 4416-4431.  | 1.6  | 76        |
| 12 | Slide electrification: charging of surfaces by moving water drops. <i>Soft Matter</i> , 2019, 15, 8667-8679.   | 1.2  | 66        |
| 13 | Removal of Surface Oxygen Vacancies Increases Conductance Through TiO <sub>2</sub> Thin Films for Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2019, 123, 13458-13466.   | 1.5  | 54        |
| 14 | Alignment of solid targets under extreme tight focus conditions generated by an ellipsoidal plasma mirror. <i>Matter and Radiation at Extremes</i> , 2019, 4, 024402.  | 1.5  | 6         |
| 15 | Wave-based laser absorption method for high-order transport—hydrodynamic codes. <i>Advances in Computational Mathematics</i> , 2019, 45, 1953-1976.  | 0.8  | 3         |
| 16 | Preface to Special Topic: Extreme High-Field Physics Driven by Lasers. <i>Matter and Radiation at Extremes</i> , 2019, 4, 063002.  | 1.5  | 0         |
| 17 | The application of atomic force microscopy in mineral flotation. <i>Advances in Colloid and Interface Science</i> , 2018, 256, 373-392.  | 7.0  | 108       |
| 18 | Evidence of Tailoring the Interfacial Chemical Composition in Normal Structure Hybrid Organohalide Perovskites by a Self-Assembled Monolayer. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 5511-5518.   | 4.0  | 32        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 19 | Ion Specificity on Electric Energy Generated by Flowing Water Droplets. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2091-2095.  | 7.2  | 58        |
| 20 | Ion Specificity on Electric Energy Generated by Flowing Water Droplets. <i>Angewandte Chemie</i> , 2018, 130, 2113-2117.   | 1.6  | 4         |
| 21 | Orientation of Ferroelectric Domains and Disappearance upon Heating Methylammonium Lead Triiodide Perovskite from Tetragonal to Cubic Phase. <i>ACS Applied Energy Materials</i> , 2018, 1, 1534-1539.                   | 2.5  | 49        |
| 22 | Applications of KPFM-Based Approaches for Surface Potential and Electrochemical Measurements in Liquid. <i>Springer Series in Surface Sciences</i> , 2018, , 391-433.  | 0.3  | 3         |
| 23 | Quantitative comparison of closed-loop and dual harmonic Kelvin probe force microscopy techniques. <i>Review of Scientific Instruments</i> , 2018, 89, 123708.   | 0.6  | 13        |
| 24 | The Interplay of Contact Layers: How the Electron Transport Layer Influences Interfacial Recombination and Hole Extraction in Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 6249-6256. | 2.1  | 68        |
| 25 | Detaching Microparticles from a Liquid Surface. <i>Physical Review Letters</i> , 2018, 121, 048002.  | 2.9  | 27        |
| 26 | Adaptive Wetting—Adaptation in Wetting. <i>Langmuir</i> , 2018, 34, 11292-11304.   | 1.6  | 66        |
| 27 | Know your full potential: Quantitative Kelvin probe force microscopy on nanoscale electrical devices. <i>Beilstein Journal of Nanotechnology</i> , 2018, 9, 1809-1819.   | 1.5  | 47        |
| 28 | How the formation of interfacial charge causes hysteresis in perovskite solar cells. <i>Energy and Environmental Science</i> , 2018, 11, 2404-2413.  | 15.6 | 289       |
| 29 | Local Time-Dependent Charging in a Perovskite Solar Cell. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 19402-19409.  | 4.0  | 109       |
| 30 | Ferroelastic Fingerprints in Methylammonium Lead Iodide Perovskite. <i>Journal of Physical Chemistry C</i> , 2016, 120, 5724-5731.   | 1.5  | 154       |
| 31 | Preparing DNA-mimicking multi-line nanocaterpillars <i>via in situ</i> nanoparticlisation of fully conjugated polymers. <i>Polymer Chemistry</i> , 2016, 7, 1422-1428.   | 1.9  | 19        |
| 32 | Humidity-Induced Grain Boundaries in MAPbI <sub>3</sub> Perovskite Films. <i>Journal of Physical Chemistry C</i> , 2016, 120, 6363-6368.   | 1.5  | 103       |
| 33 | Surface Modification of TiO <sub>2</sub> Photoanodes with Fluorinated Self-Assembled Monolayers for Highly Efficient Dye-Sensitized Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 25741-25747.   | 4.0  | 29        |
| 34 | Irradiation uniformity at the Laser MegaJoule facility in the context of the shock ignition scheme. <i>High Power Laser Science and Engineering</i> , 2014, 2, .   | 2.0  | 23        |
| 35 | Probing charge screening dynamics and electrochemical processes at the solid–liquid interface with electrochemical force microscopy. <i>Nature Communications</i> , 2014, 5, 3871.                                       | 5.8  | 97        |
| 36 | Enhanced power conversion efficiency of inverted organic solar cells by using solution processed Sn-doped TiO <sub>2</sub> as an electron transport layer. <i>Journal of Materials Chemistry A</i> , 2014, 2, 11426.     | 5.2  | 20        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 37 | Dual harmonic Kelvin probe force microscopy at the graphene-liquid interface. <i>Applied Physics Letters</i> , 2014, 104, .  | 1.5  | 50        |
| 38 | Real-space observation of unbalanced charge distribution inside a perovskite-sensitized solar cell. <i>Nature Communications</i> , 2014, 5, 5001.  | 5.8  | 294       |
| 39 | High viscosity environments: an unexpected route to obtain true atomic resolution with atomic force microscopy. <i>Nanotechnology</i> , 2014, 25, 175701.  | 1.3  | 5         |
| 40 | Electrical characterization of organic solar cell materials based on scanning force microscopy. <i>European Polymer Journal</i> , 2013, 49, 1907-1915.   | 2.6  | 46        |
| 41 | Open loop Kelvin probe force microscopy with single and multi-frequency excitation. <i>Nanotechnology</i> , 2013, 24, 475702.  | 1.3  | 63        |
| 42 | Electrical tip-sample contact in scanning conductive torsion mode. <i>Applied Physics Letters</i> , 2013, 102, 163105.   | 1.5  | 6         |
| 43 | Photoreduction of SERS-Active Metallic Nanostructures on Chemically Patterned Ferroelectric Crystals. <i>ACS Nano</i> , 2012, 6, 7373-7380.  | 7.3  | 59        |
| 44 | Electrical Characterization of Solar Cell Materials Using Scanning Probe Microscopy. <i>Nanoscience and Technology</i> , 2012, , 551-573.  | 1.5  | 3         |
| 45 | Kelvin Probe Force Microscopy in Nonpolar Liquids. <i>Langmuir</i> , 2012, 28, 13892-13899.  | 1.6  | 35        |
| 46 | Investigating morphology and electronic properties of self-assembled hybrid systems for solar cells. <i>Journal of Materials Chemistry</i> , 2011, 21, 7765.   | 6.7  | 10        |
| 47 | Electrodeposition of ZnO nanorods on opaline replica as hierarchically structured systems. <i>Journal of Materials Chemistry</i> , 2011, 21, 1079-1085.  | 6.7  | 3         |
| 48 | Photoinduced Degradation Studies of Organic Solar Cell Materials Using Kelvin Probe Force and Conductive Scanning Force Microscopy. <i>Journal of Physical Chemistry C</i> , 2011, 115, 19994-20001. | 1.5  | 33        |
| 49 | Thermodynamics of nanosecond nanobubble formation at laser-excited metal nanoparticles. <i>New Journal of Physics</i> , 2011, 13, 043018.  | 1.2  | 138       |
| 50 | Electrical Scanning Probe Microscopy of an Integrated Blocking Layer. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 6840-6844.  | 0.9  | 4         |
| 51 | Template-Based Preparation of Free-Standing Semiconducting Polymeric Nanorod Arrays on Conductive Substrates. <i>ACS Applied Materials &amp; Interfaces</i> , 2010, 2, 1573-1580.                    | 4.0  | 23        |
| 52 | Mapping of Local Conductivity Variations on Fragile Nanopillar Arrays by Scanning Conductive Torsion Mode Microscopy. <i>Nano Letters</i> , 2010, 10, 1194-1197.                                     | 4.5  | 25        |
| 53 | Light Induced Charging of Polymer Functionalized Nanorods. <i>Nano Letters</i> , 2010, 10, 2812-2816.  | 4.5  | 29        |
| 54 | Characterization of Quantum Dot/Conducting Polymer Hybrid Films and Their Application to Light-Emitting Diodes. <i>Advanced Materials</i> , 2009, 21, 5022-5026.                                     | 11.1 | 90        |

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 55 | Electrical Modes in Scanning Probe Microscopy. <i>Macromolecular Rapid Communications</i> , 2009, 30, 1167-1178.   | 2.0  | 77        |
| 56 | Integrated blocking layers for hybrid organic solar cells. <i>Energy and Environmental Science</i> , 2009, 2, 783.   | 15.6 | 23        |
| 57 | Watching Ions Move: Scanning Probe Microscopy on Perovskite Solar Cells. , 0, , .  |      | 0         |
| 58 | Two Birds with One Stone: Dual Grain-Boundary and Interface Passivation Enables > 22% Efficient Inverted Methylammonium-Free Perovskite Solar Cells. , 0, , .        |      | 0         |
| 59 | Correlating Cathodoluminescence and Kelvin Probe Force Microscopy Measurements of Methylammonium-Free 2D Ruddlesden Popper Passivated Perovskite Absorbers. , 0, , . |      | 0         |
| 60 | Anisotropic Charge Carrier Diffusion Correlated to Ferroelastic Twin Domains in MAPbI <sub>3</sub> Perovskite. , 0, , .  |      | 0         |
| 61 | Watching Ions Move: Scanning Probe Microscopy on Perovskite Solar Cells. , 0, , .  |      | 0         |