

Stephan Rauschenbach

List of Publications by Year in descending order

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44
papers

2,095
citations

236833

25
h-index

254106

43
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48
all docs

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docs citations

48
times ranked

2750
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Polymer Nanofibers via Nozzle-Free Centrifugal Spinning. <i>Nano Letters</i> , 2008, 8, 1187-1191. | 4.5 | 193 |
| 2 | Electrospray Ion Beam Deposition of Clusters and Biomolecules. <i>Small</i> , 2006, 2, 540-547. | 5.2 | 148 |
| 3 | Spin and Orbital Magnetic Moment Anisotropies of Monodispersed Bis(Phthalocyaninato)Terbium on a Copper Surface. <i>Journal of the American Chemical Society</i> , 2010, 132, 11900-11901. | 6.6 | 147 |
| 4 | The Quantum Magnetism of Individual Manganese-12-Acetate Molecular Magnets Anchored at Surfaces. <i>Nano Letters</i> , 2012, 12, 518-521. | 4.5 | 146 |
| 5 | The classical and quantum dynamics of molecular spins on graphene. <i>Nature Materials</i> , 2016, 15, 164-168. | 13.3 | 109 |
| 6 | A Close Look at Proteins: Submolecular Resolution of Two- and Three-Dimensionally Folded Cytochrome c at Surfaces. <i>Nano Letters</i> , 2012, 12, 2452-2458. | 4.5 | 105 |
| 7 | Electrospray Ion Beam Deposition: Soft-Landing and Fragmentation of Functional Molecules at Solid Surfaces. <i>ACS Nano</i> , 2009, 3, 2901-2910. | 7.3 | 92 |
| 8 | Imaging proteins at the single-molecule level. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1474-1479. | 3.3 | 86 |
| 9 | Imaging single glycans. <i>Nature</i> , 2020, 582, 375-378. | 13.7 | 72 |
| 10 | Towards the Isomer-Specific Synthesis of Higher Fullerenes and Buckybowls by the Surface-Catalyzed Cyclodehydrogenation of Aromatic Precursors. <i>Angewandte Chemie - International Edition</i> , 2010, 49, 9392-9396. | 7.2 | 69 |
| 11 | Atomic-Scale Observation of Multiconformational Binding and Energy Level Alignment of Ruthenium-Based Photosensitizers on TiO ₂ Anatase. <i>Nano Letters</i> , 2014, 14, 563-569. | 4.5 | 67 |
| 12 | Mass Spectrometry as a Preparative Tool for the Surface Science of Large Molecules. <i>Annual Review of Analytical Chemistry</i> , 2016, 9, 473-498. | 2.8 | 67 |
| 13 | Two-dimensional honeycomb network through sequence-controlled self-assembly of oligopeptides. <i>Nature Communications</i> , 2016, 7, 10335. | 5.8 | 59 |
| 14 | A hydrodynamically optimized nano-electrospray ionization source and vacuum interface. <i>Analyst</i> , 2014, 139, 1856. | 1.7 | 45 |
| 15 | Active Conformation Control of Unfolded Proteins by Hyperthermal Collision with a Metal Surface. <i>Nano Letters</i> , 2014, 14, 5609-5615. | 4.5 | 42 |
| 16 | Toward Mechanical Switching of Surface-Adsorbed [2]Catenane by in Situ Copper Complexation. <i>Journal of the American Chemical Society</i> , 2007, 129, 15662-15667. | 6.6 | 41 |
| 17 | Exploring the Molecular Conformation Space by Soft Molecule-Surface Collision. <i>Journal of the American Chemical Society</i> , 2020, 142, 21420-21427. | 6.6 | 41 |
| 18 | Characterization of a silicon-on-insulator based thin film resistor in electrolyte solutions for sensor applications. <i>Journal of Applied Physics</i> , 2004, 95, 3811-3815. | 1.1 | 40 |

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|----|--|------|-----------|
| 19 | Silicon-on-Insulator Based Thin-Film Resistor for Chemical and Biological Sensor Applications. ChemPhysChem, 2003, 4, 1104-1106. | 1.0 | 36 |
| 20 | Grafting Crown Ether Alkali Host-Guest Complexes at Surfaces by Electrospray Ion Beam Deposition. Journal of Physical Chemistry C, 2010, 114, 17768-17772. | 1.5 | 36 |
| 21 | Two-Dimensional Folding of Polypeptides into Molecular Nanostructures at Surfaces. ACS Nano, 2017, 11, 2420-2427. | 7.3 | 35 |
| 22 | Chemical Modification of Graphene via Hyperthermal Molecular Reaction. Journal of the American Chemical Society, 2014, 136, 13482-13485. | 6.6 | 30 |
| 23 | Carbohydrate Self-Assembly at Surfaces: STM Imaging of Sucrose Conformation and Ordering on Cu(100). Angewandte Chemie - International Edition, 2019, 58, 8336-8340. | 7.2 | 29 |
| 24 | Conical octopole ion guide: Design, focusing, and its application to the deposition of low energetic clusters. Review of Scientific Instruments, 2006, 77, 013302. | 0.6 | 28 |
| 25 | Identifying the origin of local flexibility in a carbohydrate polymer. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, . | 3.3 | 27 |
| 26 | Spontaneous Charge Separation and Sublimation Processes are Ubiquitous in Nature and in Ionization Processes in Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2018, 29, 304-315. | 1.2 | 26 |
| 27 | Crystalline Inverted Membranes Grown on Surfaces by Electrospray Ion Beam Deposition in Vacuum. Advanced Materials, 2012, 24, 2761-2767. | 11.1 | 25 |
| 28 | Soft-landing electrospray ion beam deposition of sensitive oligoynes on surfaces in vacuum. International Journal of Mass Spectrometry, 2015, 377, 228-234. | 0.7 | 25 |
| 29 | Bottom up fabrication of (9, 0) zigzag and (6, 6) armchair carbon nanotube end-caps on the Rh(1 1 1) surface. Carbon, 2015, 84, 444-447. | 5.4 | 23 |
| 30 | Electron microscopy of polyoxometalate ions on graphene by electrospray ion beam deposition. Nanoscale, 2018, 10, 4952-4961. | 2.8 | 23 |
| 31 | Fast Molecular Compression by a Hyperthermal Collision Gives Bond-Selective Mechanochemistry. Physical Review Letters, 2021, 126, 056001. | 2.9 | 22 |
| 32 | Substrate-Selective Morphology of Cesium Iodide Clusters on Graphene. ACS Nano, 2020, 14, 4626-4635. | 7.3 | 20 |
| 33 | Gas Flow and Ion Transfer in Heated ESI Capillary Interfaces. Journal of the American Society for Mass Spectrometry, 2018, 29, 761-773. | 1.2 | 17 |
| 34 | Spatially resolved photocurrents in graphene nanoribbon devices. Applied Physics Letters, 2013, 102, 043106. | 1.5 | 15 |
| 35 | Polymorphism in carbohydrate self-assembly at surfaces: STM imaging and theoretical modelling of trehalose on Cu(100). RSC Advances, 2019, 9, 35813-35819. | 1.7 | 15 |
| 36 | Self-assembly of bis(phthalocyaninato)terbium on metal surfaces. Physica Scripta, 2015, 90, 098003. | 1.2 | 14 |

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|----|--|-----|-----------|
| 37 | Low-energy electron holography imaging of conformational variability of single-antibody molecules from electrospray ion beam deposition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, . | 3.3 | 14 |
| 38 | Chemical Analysis of Complex Surface-Adsorbed Molecules and Their Reactions by Means of Cluster-Induced Desorption/Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 3328-3334. | 3.2 | 13 |
| 39 | Carbohydrate Self-Assembly at Surfaces: STM Imaging of Sucrose Conformation and Ordering on Cu(100). <i>Angewandte Chemie</i> , 2019, 131, 8424-8428. | 1.6 | 12 |
| 40 | Transfer conditions and transmission bias in capillaries of vacuum interfaces. <i>International Journal of Mass Spectrometry</i> , 2020, 447, 116239. | 0.7 | 8 |
| 41 | Growth mechanism of solution-deposited layers of the charge-transfer salt CuDDQ. <i>Physica Status Solidi (B): Basic Research</i> , 2007, 244, 4346-4350. | 0.7 | 5 |
| 42 | Catalyzing Bond-Dissociation in Graphene via Alkali-Halide Molecules. <i>Small</i> , 2021, 17, e2102037. | 5.2 | 1 |
| 43 | Carbohydrate Self-Assembly at Surfaces: STM Imaging of Sucrose Conformation and Ordering on Cu(100). <i>Angewandte Chemie</i> , 2019, 131, 8686. | 1.6 | 0 |
| 44 | Material and Charge Transport of Large Organic Salt Clusters and Nanoparticles in Electrospray Ion Beam Deposition. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 1648-1658. | 1.2 | 0 |