

Susan K Fullerton-Shirey

List of Publications by Year in descending order

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61
papers

2,172
citations

279798

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223800

46
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all docs

62
docs citations

62
times ranked

4154
citing authors

#	ARTICLE	IF	CITATIONS
1	2D materials advances: from large scale synthesis and controlled heterostructures to improved characterization techniques, defects and applications. 2D Materials, 2016, 3, 042001.	4.4	408
2	Effect of LiClO ₄ on the Structure and Mobility of PEO-Based Solid Polymer Electrolytes. Macromolecules, 2009, 42, 2142-2156.	4.8	249
3	Realizing Large-Scale, Electronic-Grade Two-Dimensional Semiconductors. ACS Nano, 2018, 12, 965-975.	14.6	172
4	Tuning the Electronic and Photonic Properties of Monolayer MoS ₂ via In Situ Rhenium Substitutional Doping. Advanced Functional Materials, 2018, 28, 1706950.	14.9	137
5	Reconfigurable Ion Gating of 2H-MoTe ₂ Field-Effect Transistors Using Poly(ethylene Terephthalate) Dielectric. ACS Nano, 2018, 12, 10784-10791.	14.6	110
6	Structure and Mobility of PEO/LiClO ₄ Solid Polymer Electrolytes Filled with Al ₂ O ₃ Nanoparticles. Journal of Physical Chemistry C, 2010, 114, 9196-9206.	3.1	109
7	Scanning Tunneling Microscopy and Spectroscopy of Air Exposure Effects on Molecular Beam Epitaxy Grown WSe ₂ Monolayers and Bilayers. ACS Nano, 2016, 10, 4258-4267.	14.6	72
8	Influence of Fe ₂ O ₃ Nanofiller Shape on the Conductivity and Thermal Properties of Solid Polymer Electrolytes: Nanorods versus Nanospheres. Journal of Physical Chemistry C, 2012, 116, 21216-21223.	3.1	69
9	Atomic Layer Deposition of Al ₂ O ₃ on WSe ₂ Functionalized by Titanyl Phthalocyanine. ACS Nano, 2016, 10, 6888-6896.	14.6	69
10	Considerations for Utilizing Sodium Chloride in Epitaxial Molybdenum Disulfide. ACS Applied Materials & Interfaces, 2018, 10, 40831-40837.	8.0	58
11	Impact of Post-Lithography Polymer Residue on the Electrical Characteristics of MoS ₂ and WSe ₂ Field Effect Transistors. Advanced Materials Interfaces, 2019, 6, 1801321.	3.7	56
12	Scalable BEOL compatible 2D tungsten diselenide. 2D Materials, 2020, 7, 015029.	4.4	41
13	Monolayer Solid-State Electrolyte for Electric Double Layer Gating of Graphene Field-Effect Transistors. ACS Nano, 2017, 11, 5453-5464.	14.6	40
14	Electric-double-layer-gated transistors based on two-dimensional crystals: recent approaches and advances. JPhys Materials, 2020, 3, 032001.	4.2	34
15	Effect of Nanoparticle Shape on the Electrical and Thermal Properties of Solid Polymer Electrolytes. Journal of Physical Chemistry C, 2019, 123, 10720-10726.	3.1	32
16	Properties of synthetic epitaxial graphene/molybdenum disulfide lateral heterostructures. Carbon, 2017, 125, 551-556.	10.3	27
17	Two-dimensional electric-double-layer Esaki diode. Npj 2D Materials and Applications, 2019, 3, .	7.9	27
18	Easily prepared ruthenium-complex nanomicelle probes for two-photon quantitative imaging of oxygen in aqueous media. RSC Advances, 2015, 5, 291-300.	3.6	26

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19	Room-Temperature Graphene-Nanoribbon Tunneling Field-Effect Transistors. Npj 2D Materials and Applications, 2019, 3, .	7.9	26
20	Pulse Dynamics of Electric Double Layer Formation on All-Solid-State Graphene Field-Effect Transistors. ACS Applied Materials & Interfaces, 2018, 10, 43166-43176.	8.0	25
21	<i>In Situ</i> Observation of Initial Stage in Dielectric Growth and Deposition of Ultrahigh Nucleation Density Dielectric on Two-Dimensional Surfaces. Nano Letters, 2015, 15, 6626-6633.	9.1	24
22	Electric Double Layer Dynamics in Poly(ethylene oxide) LiClO ₄ on Graphene Transistors. Journal of Physical Chemistry C, 2017, 121, 16996-17004.	3.1	24
23	Deconvoluting the Photonic and Electronic Response of 2D Materials: The Case of MoS ₂ . Scientific Reports, 2017, 7, 16938.	3.3	23
24	Magnetic Alignment of Gamma (Core)–Alpha (Shell) Fe ₂ O ₃ Nanorods in a Solid Polymer Electrolyte for Li-Ion Batteries. Journal of Physical Chemistry C, 2014, 118, 18836-18845.	3.1	22
25	Electric-double-layer doping of WSe ₂ field-effect transistors using polyethylene-oxide cesium perchlorate. Journal of Applied Physics, 2016, 120, .	2.5	20
26	Addressable Direct-Write Nanoscale Filament Formation and Dissolution by Nanoparticle-Mediated Bipolar Electrochemistry. ACS Nano, 2017, 11, 4976-4984.	14.6	20
27	Electric Double-Layer Gating of Two-Dimensional Field-Effect Transistors Using a Single-Ion Conductor. ACS Applied Materials & Interfaces, 2019, 11, 35879-35887.	8.0	20
28	Influence of thermal history and humidity on the ionic conductivity of nanoparticle-filled solid polymer electrolytes. Journal of Polymer Science, Part B: Polymer Physics, 2011, 49, 1496-1505.	2.1	19
29	Growth Mode Transition from Monolayer by Monolayer to Bilayer by Bilayer in Molecularly Flat Titanyl Phthalocyanine Film. Journal of Physical Chemistry C, 2017, 121, 6721-6728.	3.1	19
30	Steep subthreshold swing tunnel FETs: GaN/InN/GaN and transition metal dichalcogenide channels. , 2015, , .		18
31	Loading and Distribution of a Model Small Molecule Drug in Poly(<i>N</i> -isopropylacrylamide) Brushes: a Neutron Reflectometry and AFM Study. Langmuir, 2013, 29, 3259-3268.	3.5	17
32	Increasing the Room-Temperature Electric Double Layer Retention Time in Two-Dimensional Crystal FETs. ACS Applied Materials & Interfaces, 2017, 9, 25006-25013.	8.0	12
33	Tuning transport across MoS ₂ /graphene interfaces via as-grown lateral heterostructures. Npj 2D Materials and Applications, 2020, 4, .	7.9	12
34	First-Principles Study of Crown Ether and Crown Ether-Li Complex Interactions with Graphene. Journal of Physical Chemistry C, 2015, 119, 20016-20022.	3.1	11
35	Modification of the Electronic Transport in Atomically Thin WSe ₂ by Oxidation. Advanced Materials Interfaces, 2020, 7, 2000422.	3.7	11
36	A Molecular Dynamics Study of the Structural Dependence of Boron Oxide Nanoparticles on Shape. Nano Letters, 2005, 5, 363-368.	9.1	9

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37	Solution-Cast Monolayers of Cobalt Crown Ether Phthalocyanine on Highly Ordered Pyrolytic Graphite. <i>Journal of Physical Chemistry C</i> , 2015, 119, 21992-22000.	3.1	9
38	Energetics of metal ion adsorption on and diffusion through crown ethers: First principles study on two-dimensional electrolyte. <i>Solid State Ionics</i> , 2017, 301, 176-181.	2.7	9
39	Uniform large-area growth of nanotemplated high-quality monolayer MoS ₂ . <i>Applied Physics Letters</i> , 2017, 110, 263103.	3.3	8
40	Ion-Locking in Solid Polymer Electrolytes for Reconfigurable Gateless Lateral Graphene p-n Junctions. <i>Materials</i> , 2020, 13, 1089.	2.9	7
41	Record high current density and low contact resistance in MoS ₂ FETs by ion doping. , 2016, , .		6
42	Molecularly Thin Electrolyte for All Solid-State Nonvolatile Two-Dimensional Crystal Memory. <i>Nano Letters</i> , 2019, 19, 8911-8919.	9.1	6
43	Single- versus Dual-Ion Conductors for Electric Double Layer Gating: Finite Element Modeling and Hall-Effect Measurements. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 40850-40858.	8.0	6
44	Triggerable Ion Release in Polymerized Ionic Liquids Containing Thermally Labile Diels-Alder Linkages. , 2020, 2, 331-335.		6
45	A molecular interpretation of vitreous boron oxide dynamics. <i>Journal of Chemical Physics</i> , 2004, 121, 8562.	3.0	5
46	Silica-coated ruthenium-complex nanoprobe for two-photon oxygen microscopy in biological media. <i>Optical Materials Express</i> , 2017, 7, 1066.	3.0	5
47	Batch-Fabricated WSe ₂ -on-Sapphire Field-Effect Transistors Grown by Chemical Vapor Deposition. <i>IEEE Transactions on Electron Devices</i> , 2020, 67, 1839-1844.	3.0	5
48	Direct Write Formation and Dissolution of Silver Nanofilaments in Ionic Liquid-Polymer Electrolyte Composites. <i>Small</i> , 2018, 14, 1802023.	10.0	4
49	Nanopore-Templated Silver Nanoparticle Arrays Photopolymerized in Zero-Mode Waveguides. <i>Frontiers in Chemistry</i> , 2019, 7, 216.	3.6	4
50	Silver Nanofilament Formation Dynamics in a Polymer-Ionic Liquid Thin Film by Direct Write. <i>Advanced Functional Materials</i> , 2020, 30, 1907950.	14.9	4
51	Electric-double-layer p-n junctions in WSe ₂ . <i>Scientific Reports</i> , 2020, 10, 12890.	3.3	4
52	Combining Hyperbranched and Linear Structures in Solid Polymer Electrolytes to Enhance Mechanical Properties and Room-Temperature Ion Transport. <i>Frontiers in Chemistry</i> , 2021, 9, 563864.	3.6	4
53	Photoluminescence Switching Effect in a Two-Dimensional Atomic Crystal. <i>ACS Nano</i> , 2021, 15, 19439-19445.	14.6	4
54	Electric-field-induced optical hysteresis in single-layer WSe ₂ . <i>Applied Physics Letters</i> , 2019, 115, 161103.	3.3	3

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55	Demonstration of electric double layer p-i-n junction in WSe_2 . , 2016, , .		2
56	Investigation of aging and restoration of polyethylene-oxide cesium-perchlorate solid polymer electrolyte used for ion doping of a WSe_2 field-effect transistor. , 2014, , .		1
57	Reconfigurable p-n junction formation and bandgap opening in bilayer graphene using polyethylene oxide and $CsClO_4$ solid polymer electrolyte. , 2015, , .		1
58	2D Materials: Tuning the Electronic and Photonic Properties of Monolayer MoS_2 via In Situ Rhenium Substitutional Doping (Adv. Funct. Mater. 16/2018). Advanced Functional Materials, 2018, 28, 1870105.	14.9	1
59	Using Ions to Control Transport in Two-Dimensional Materials for Ion-Controlled Electronics. , 2018, , .		0
60	A ready-to-use, thermoresponsive, and extended-release delivery system for the paranasal sinuses. Drug Delivery and Translational Research, 2022, 12, 708-719.	5.8	0
61	Highly Stable Two-photon Oxygen Imaging Probe Based on a Ruthenium-Complex Encapsulated in a Silica-coated Nanomicelle. , 2016, , .		0