T Susi

List of Publications by Year
in descending order

72 papers	2,717 citations	186265 28 h-index	189892 50 g-index
73 all docs	73 docs citations	73 times ranked	3952 citing authors

#	Article	IF	Citations
1	Graphene Lattices with Embedded Transition-Metal Atoms and Tunable Magnetic Anisotropy Energy: Implications for Spintronic Devices. ACS Applied Nano Materials, 2022, 5, 1562-1573.	5.0	13
2	Toward Exotic Layered Materials: 2D Cuprous Iodide. Advanced Materials, 2022, 34, e2106922.	21.0	28
3	Beam-driven dynamics of aluminium dopants in graphene. 2D Materials, 2022, 9, 035009.	4.4	8
4	Stepâ€Byâ€Step Atomic Insights into Structural Reordering from 2D to 3D MoS 2. Advanced Functional Materials, 2021, 31, 2008395.	14.9	9
5	ab initio description of bonding for transmission electron microscopy. Ultramicroscopy, 2021, 231, 113253.	1.9	12
6	Atomic-Level Structural Engineering of Graphene on a Mesoscopic Scale. Nano Letters, 2021, 21, 5179-5185.	9.1	24
7	Mechanism of Electron-Beam Manipulation of Single-Dopant Atoms in Silicon. Journal of Physical Chemistry C, 2021, 125, 16041-16048.	3.1	10
8	Single Indium Atoms and Few-Atom Indium Clusters Anchored onto Graphene via Silicon Heteroatoms. ACS Nano, 2021, 15, 14373-14383.	14.6	19
9	Tailoring Electronic and Magnetic Properties of Graphene by Phosphorus Doping. ACS Applied Materials & Interfaces, 2020, 12, 34074-34085.	8.0	20
10	Coherent diffraction of hydrogen through the 246 pm lattice of graphene. New Journal of Physics, 2019, 21, 033004.	2.9	15
11	Electronâ€Beam Manipulation of Silicon Impurities in Singleâ€Walled Carbon Nanotubes. Advanced Functional Materials, 2019, 29, 1901327.	14.9	14
12	Direct imaging of light-element impurities in graphene reveals triple-coordinated oxygen. Nature Communications, 2019, 10, 4570.	12.8	39
13	Influence of temperature on the displacement threshold energy in graphene. Scientific Reports, 2019, 9, 12981.	3.3	12
14	Direct visualization of the 3D structure of silicon impurities in graphene. Applied Physics Letters, 2019, 114, .	3.3	15
15	Engineering single-atom dynamics with electron irradiation. Science Advances, 2019, 5, eaav2252.	10.3	61
16	Quantifying transmission electron microscopy irradiation effects using two-dimensional materials. Nature Reviews Physics, 2019, 1, 397-405.	26.6	79
17	Scanning transmission electron microscopy under controlled low-pressure atmospheres. Ultramicroscopy, 2019, 203, 76-81.	1.9	24
18	Silicon Substitution in Nanotubes and Graphene via Intermittent Vacancies. Journal of Physical Chemistry C, 2019, 123, 13136-13140.	3.1	27

#	Article	IF	Citations
19	Efficient first principles simulation of electron scattering factors for transmission electron microscopy. Ultramicroscopy, 2019, 197, 16-22.	1.9	29
20	Perforating Freestanding Molybdenum Disulfide Monolayers with Highly Charged Ions. Journal of Physical Chemistry Letters, 2019, 10, 904-910.	4.6	42
21	Atomic Structure of Intrinsic and Electron-Irradiation-Induced Defects in MoTe₂. Chemistry of Materials, 2018, 30, 1230-1238.	6.7	56
22	Chemical Oxidation of Graphite: Evolution of the Structure and Properties. Journal of Physical Chemistry C, 2018, 122, 929-935.	3.1	38
23	Implanting Germanium into Graphene. ACS Nano, 2018, 12, 4641-4647.	14.6	86
24	Zigzag sp² Carbon Chains Passing through an sp³ Framework: A Driving Force toward Room-Temperature Ferromagnetic Graphene. ACS Nano, 2018, 12, 12847-12859.	14.6	19
25	Graphene hybrids and extended defects: Revealing 3D structures and new insights to radiation damage. Microscopy and Microanalysis, 2018, 24, 1582-1583.	0.4	0
26	Electron-Beam Manipulation of Silicon Dopants in Graphene. Nano Letters, 2018, 18, 5319-5323.	9.1	98
27	Atomic-Scale <i>in Situ</i> Observations of Crystallization and Restructuring Processes in Two-Dimensional MoS₂ Films. ACS Nano, 2018, 12, 8758-8769.	14.6	51
28	Atomic-Scale Deformations at the Interface of a Mixed-Dimensional van der Waals Heterostructure. ACS Nano, 2018, 12, 8512-8519.	14.6	19
29	Single-atom spectroscopy of phosphorus dopants implanted into graphene. 2D Materials, 2017, 4, 021013.	4.4	77
30	Manipulating low-dimensional materials down to the level of single atoms with electron irradiation. Ultramicroscopy, 2017, 180, 163-172.	1.9	135
31	Buckyball sandwiches. Science Advances, 2017, 3, e1700176.	10.3	50
32	Grain boundary-mediated nanopores in molybdenum disulfide grown by chemical vapor deposition. Nanoscale, 2017, 9, 1591-1598.	5.6	31
33	Robust theoretical modelling of core ionisation edges for quantitative electron energy loss spectroscopy of B- and N-doped graphene. Journal of Physics Condensed Matter, 2017, 29, 225303.	1.8	8
34	Towards atomically precise manipulation of 2D nanostructures in the electron microscope. 2D Materials, 2017, 4, 042004.	4.4	73
35	Understanding and Exploiting the Interaction of Electron Beams With Low-dimensional Materials - From Controlled Atomic-level Manipulation to Circumventing Radiation Damage. Microscopy and Microanalysis, 2017, 23, 196-197.	0.4	1
36	Structure and Energetics of Embedded Si Patterns in Graphene. Physica Status Solidi (B): Basic Research, 2017, 254, 1700188.	1.5	5

#	Article	IF	Citations
37	Structure and electronic states of a graphene double vacancy with an embedded Si dopant. Journal of Chemical Physics, 2017, 147, 194702.	3.0	9
38	Computational insights and the observation of SiC nanograin assembly: towards 2D silicon carbide. Scientific Reports, 2017, 7, 4399.	3.3	73
39	A new detection scheme for van der Waals heterostructures, imaging individual fullerenes between graphene sheets, and controlling the vacuum in scanning transmission electron microscopy. Microscopy and Microanalysis, 2017, 23, 460-461.	0.4	8
40	Comment on â€œTemperature dependence of atomic vibrations in mono-layer grapheneâ€•[J. Appl. Phys. 118, 074302 (2015)]. Journal of Applied Physics, 2016, 119, 066101.	2.5	2
41	Spectromicroscopy of C60 and azafullerene C59N: Identifying surface adsorbed water. Scientific Reports, 2016, 6, 35605.	3.3	19
42	Isotope analysis in the transmission electron microscope. Nature Communications, 2016, 7, 13040.	12.8	64
43	<i>Ab initio</i>density functional theory study on the atomic and electronic structure of GaP/Si(001) heterointerfaces. Physical Review B, 2016, 94, .	3.2	28
44	Highly individual SWCNTs for high performance thin film electronics. Carbon, 2016, 103, 228-234.	10.3	63
45	Uncovering the ultimate performance of single-walled carbon nanotube films as transparent conductors. Applied Physics Letters, 2015, 107, .	3.3	57
46	X-ray photoelectron spectroscopy of graphitic carbon nanomaterials doped with heteroatoms. Beilstein Journal of Nanotechnology, 2015, 6, 177-192.	2.8	319
47	Gas phase synthesis of non-bundled, small diameter single-walled carbon nanotubes with near-armchair chiralities. Applied Physics Letters, 2015, 107, .	3.3	54
48	Calculation of the graphene C<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mi>s</mml:mi></mml:mrow></mml:m level binding energy. Physical Review B, 2015, 91, .	3.2	36
49	On the bonding environment of phosphorus in purified doped single-walled carbon nanotubes. Carbon, 2015, 81, 91-95.	10.3	19
50	Core level binding energies of functionalized and defective graphene. Beilstein Journal of Nanotechnology, 2014, 5, 121-132.	2.8	70
51	Dissociation of oxygen on pristine and nitrogen-doped carbon nanotubes: a spin-polarized density functional study. RSC Advances, 2014, 4, 15225-15235.	3.6	36
52	Siliconâ€"Carbon Bond Inversions Driven by 60-keV Electrons in Graphene. Physical Review Letters, 2014, 113, 115501.	7.8	123
53	High oxygen reduction activity of few-walled carbon nanotubes with low nitrogen content. Applied Catalysis B: Environmental, 2014, 158-159, 233-241.	20.2	62
54	Atom-by-Atom STEM Investigation of Defect Engineering in Graphene. Microscopy and Microanalysis, 2014, 20, 1736-1737.	0.4	2

#	Article	IF	Citations
55	Improvement of the mechanical properties of single-walled carbon nanotube networks by carbon plasma coatings. Carbon, 2013, 53, 50-61.	10.3	10
56	Identification of Nitrogen Dopants in Single-Walled Carbon Nanotubes by Scanning Tunneling Microscopy. ACS Nano, 2013, 7, 7219-7226.	14.6	10
57	Atomistic Description of Electron Beam Damage in Nitrogen-Doped Graphene and Single-Walled Carbon Nanotubes. ACS Nano, 2012, 6, 8837-8846.	14.6	119
58	Growth, dispersion, and electronic devices of nitrogenâ€doped singleâ€wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2012, 249, 2416-2419.	1.5	6
59	Direct synthesis of high-quality single-walled carbon nanotubes by the physical nucleation of iron nanoparticles in an atmospheric pressure carbon monoxide flow. Carbon, 2012, 50, 5343-5345.	10.3	6
60	Influence of the diameter of single-walled carbon nanotube bundles on the optoelectronic performance of dry-deposited thin films. Beilstein Journal of Nanotechnology, 2012, 3, 692-702.	2.8	19
61	Optoelectronic Performance of Nitrogen-Doped Single-Walled Carbon Nanotube Films. Journal of Nanoelectronics and Optoelectronics, 2012, 7, 68-72.	0.5	2
62	TEM Verification of Optical Diameter Distribution Analysis for Nitrogen-Doped SWCNT Films. Journal of Nanoelectronics and Optoelectronics, 2012, 7, 17-21.	0.5	0
63	The Use of NH₃ to Promote the Production of Large-Diameter Single-Walled Carbon Nanotubes with a Narrow (<i>n,m</i>) Distribution. Journal of the American Chemical Society, 2011, 133, 1224-1227.	13.7	81
64	Nitrogen-Doped Single-Walled Carbon Nanotube Thin Films Exhibiting Anomalous Sheet Resistances. Chemistry of Materials, 2011, 23, 2201-2208.	6.7	43
65	Mechanism of the initial stages of nitrogen-doped single-walled carbon nanotube growth. Physical Chemistry Chemical Physics, 2011, 13, 11303.	2.8	15
66	Selective differential ammonia gas sensor based on Nâ€doped SWCNT films. Physica Status Solidi (B): Basic Research, 2011, 248, 2462-2466.	1.5	21
67	A comparative study of field emission from NanoBuds, nanographite and pure or N-doped single-wall carbon nanotubes. Physica Status Solidi (B): Basic Research, 2010, 247, 3051-3054.	1.5	15
68	Mechanism study of floating catalyst CVD synthesis of SWCNTs. Physica Status Solidi (B): Basic Research, 2010, 247, 2708-2712.	1.5	8
69	Nitrogenâ€doped SWCNT synthesis using ammonia and carbon monoxide. Physica Status Solidi (B): Basic Research, 2010, 247, 2726-2729.	1.5	19
70	High quality SWCNT synthesis in the presence of NH₃ using a vertical flow aerosol reactor. Physica Status Solidi (B): Basic Research, 2009, 246, 2507-2510.	1.5	14
71	Incremental Variation in the Number of Carbon Nanotube Walls with Growth Temperature. Journal of Physical Chemistry C, 2009, 113, 2212-2218.	3.1	22
72	CVD Synthesis of Hierarchical 3D MWCNT/Carbon-Fiber Nanostructures. Journal of Nanomaterials, 2008, 2008, 1-7.	2.7	14