Robert Sporken

List of Publications by Year
in descending order

87 papers	2,288 citations	218381 26 h-index	233125 45 g-index
88 all docs	88 docs citations	88 times ranked	2895 citing authors

#	Article	IF	Citations
1	Resonant-photoemission study ofSnO2: Cationic origin of the defect band-gap states. Physical Review B, 1990, 42, 11914-11925.	1.1	207
2	Surface investigation on CexZr1-xO2 compounds. Physical Chemistry Chemical Physics, 1999, 1, 5717-5724.	1.3	163
3	Polymer-layered silicateâ€“carbon nanotube nanocomposites: unique nanofiller synergistic effect. Composites Science and Technology, 2004, 64, 2317-2323.	3.8	135
4	Localized state and charge transfer in nitrogen-doped graphene. Physical Review B, 2012, 85, .	1.1	134
5	Molecular beam epitaxial growth of CdTe and HgCdTe on Siâ€‰(100). Applied Physics Letters, 1989, 55, 1879-1881.	1.5	106
6	Predicting the radial electric field imposed by externally driven radial currents in tokamaks. Nuclear Fusion, 1994, 34, 171-183.	1.6	96
7	Charge transfer and electronic doping in nitrogen-doped graphene. Scientific Reports, 2015, 5, 14564.	1.6	79
8	Photoluminescence properties and quantum size effect of ZnO nanoparticles confined inside a faujasite X zeolite matrix. Chemical Physics Letters, 2006, 428, 312-316.	1.2	48
9	Incipient oxidation of magnesium: A high-resolution electron-energy-loss and photoemission study. Physical Review B, 1989, 39, 3620-3631.	1.1	47
10	Grain Boundaries in Graphene on SiC(0001Ì…) Substrate. Nano Letters, 2014, 14, 6382-6386.	4.5	46
11	Formation of Meâ€“Oâ€“Si covalent bonds at the interface between polysilazane and stainless steel. Applied Surface Science, 2014, 320, 519-523.	3.1	46
12	The interface formation as studied by electron spectroscopies. Surface Science, 1990, 235, 5-14.	0.8	45
13	Molecular beam epitaxy and characterization of CdTe(211) and CdTe(133) films on GaAs(211)Bsubstrates. Applied Physics Letters, 1991, 58, 1988-1990.	1.5	45
14	Synthesis and characterization of conductive titanium monoxide films. Diffusion of silicon in titanium monoxide films. Vacuum, 1998, 51, 153-155.	1.6	40
15	Growth and characterization of CdTe/Si heterostructures â€” effect of substrate orientation. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 77, 93-100.	1.7	40
16	The aluminium/sapphire interface formation at high temperature: an AES and LEED study. Surface Science, 1995, 323, 175-187.	0.8	38
17	New development on the control of homoepitaxial and heteroepitaxial growth of CdTe and HgCdTe by MBE. Journal of Crystal Growth, 1991, 111, 698-710.	0.7	37
18	Heteroepitaxy of CdTe on GaAs and silicon substrates. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1993, 16, 51-56.	1.7	37

#	Article	IF	Citations
19	Interface properties and valence-band discontinuity of MnS/ZnSe heterostructures. Physical Review B, 1996, 54, 2718-2722.	1.1	33
20	Hg incorporation in CdTe during the growth of HgTeâ€CdTe superlattices by molecular beam epitaxy. Applied Physics Letters, 1987, 51, 1545-1547.	1.5	32
21	Molecular beam epitaxial growth of CdTe on 5â€in.â€diam Siâ€‰(100). Applied Physics Letters, 1990, 57, 1449-1451.	1.5	32
22	Molecular beam epitaxy and characterization of HgCdTe(111)Bon Si(100). Applied Physics Letters, 1991, 59, 81-83.	1.5	32
23	Surface Morphology and Defect Formation Mechanisms for HgCdTe (211)B Grown by Molecular Beam Epitaxy. Journal of Electronic Materials, 2008, 37, 1171-1183.	1.0	31
24	Wurtzite CdS on CdTe grown by molecular beam epitaxy. Journal of Electronic Materials, 2000, 29, 718-722.	1.0	30
25	The effect of As passivation on the molecular beam epitaxial growth of high-quality single-domain CdTe(111)B on Si(111) substrates. Applied Physics Letters, 1999, 75, 349-351.	1.5	29
26	Analysis of semiconductors and insulators by high-resolution electron energy loss spectroscopy?prospects for quantification. Surface and Interface Analysis, 1990, 15, 189-205.	0.8	28
27	Identification of the adsorption sites of molecular oxygen on Si(111) using XPS. Progress in Surface Science, 1995, 50, 315-324.	3.8	26
28	Direct growth of graphitic carbon on Si(111). Applied Physics Letters, 2013, 102, .	1.5	24
29	Investigation of metalâ€“GaN and metalâ€“AlGaN contacts by XPS depth profiles and by electrical measurements. Journal of Crystal Growth, 2001, 230, 558-563.	0.7	22
30	Origin of dual epitaxy in the growth of CdTe on (2Ì„1Ì„1Ì„) GaAs. Applied Physics Letters, 1992, 60, 1372-1374.	1.5	20
31	Fourier transform analysis of STM images of multilayer graphene moirÃ© patterns. Carbon, 2015, 83, 48-52.	5.4	20
32	Photoemission study of the Al-Sb(111) interface. Physical Review B, 1987, 35, 7927-7935.	1.1	19
33	Photoluminescent properties of polyoxyethylene alkyl ether-type neutral surfactant templated mesoporous materials CMI-1: The absence of the 1.9eV PL band. Chemical Physics Letters, 2006, 420, 225-229.	1.2	19
34	Random laser action of ZnO@mesoporous silicas. Nanotechnology, 2008, 19, 105710.	1.3	19
35	Selective control of molecule charge state on graphene using tip-induced electric field and nitrogen doping. Npj 2D Materials and Applications, 2019, 3, .	3.9	19
36	Inverse-photoemission spectroscopy of GaSe and InSe. Physical Review B, 1994, 49, 11093-11099.	1.1	18

#	Article	IF	Citations
37	Preparation and characterisation of mixed oxide (Ce,Zr)O2 thin films on Si (111) substrates. Applied Surface Science, 1999, 142, 159-163.	3.1	18
38	Work function measurements with a high resolution electron energy loss spectrometer: Application to the interaction of oxygen with Ag(110). Surface Science, 1985, 160, 443-450.	0.8	17
39	Chemical interactions at the interface between aluminium nitride and iron oxide determined by XPS. Surface Science, 1995, 330, 75-85.	0.8	17
40	Electron spectroscopy study of the interface. Surface Science, 1996, 359, 82-92.	0.8	17
41	on GaAs grown by molecular beam epitaxy. Journal of Crystal Growth, 1996, 159, 94-98.	0.7	16
42	STM study of the Te/Si(100) interface. Applied Surface Science, 1999, 142, 475-480.	3.1	15
43	Selective epitaxy of cadmium telluride on silicon by MBE. Journal of Electronic Materials, 2000, 29, 760-764.	1.0	15
44	Giant tunnel-electron injection in nitrogen-doped graphene. Physical Review B, 2015, 91, .	1.1	15
45	Substrate temperature dependence of the crystalline quality for the synthesis of pure-phase MoTe₂ on graphene/6H-SiC(0001) by molecular beam epitaxy. Nanotechnology, 2020, 31, 115702.	1.3	14
46	Molecular adsorbates as probes of the local properties of doped graphene. Scientific Reports, 2016, 6, 24796.	1.6	13
47	ZnO(0001) surfaces probed by scanning tunneling spectroscopy: Evidence for an inhomogeneous electronic structure. Applied Physics Letters, 2009, 95, .	1.5	12
48	The Effect of Wet Etching on Surface Properties of HgCdTe. Journal of Electronic Materials, 2009, 38, 1781-1789.	1.0	12
49	Thermally Activated Processes at the Co/ZnO Interface Elucidated Using High Energy X-rays. Journal of Physical Chemistry C, 2011, 115, 7411-7418.	1.5	12
50	Controlling Hydrogen-Transfer Rate in Molecules on Graphene by Tunable Molecular Orbital Levels. Journal of Physical Chemistry Letters, 2019, 10, 6897-6903.	2.1	12
51	The formation of the Al-InSb(110) interface. Surface Science, 1988, 193, 47-56.	0.8	11
52	Growth of atomically flat Ag on mica. Surface Science, 2004, 572, 459-466.	0.8	11
53	Arsenic deposition as a precursor layer on silicon (211) and (311) surfaces. Journal of Electronic Materials, 2005, 34, 846-850.	1.0	11
54	Adhesion, resistivity and structural, optical properties of molybdenum on steel sheet coated with barrier layer done by solâ€“gel for CIGS solar cells. Thin Solid Films, 2013, 531, 535-540.	0.8	11

#	Article	IF	Citations
55	Intraconfigurational Transition due to Surface-Induced Symmetry Breaking in Noncovalently Bonded Molecules. Journal of Physical Chemistry Letters, 2020, 11, 9329-9335.	2.1	11
56	Epitaxial growth of aluminum nitride layers on Si(111) at high temperature and for different thicknesses. Journal of Materials Research, 1997, 12, 175-188.	1.2	10
57	Growth of Ag thin films on ZnO(0 0 0 â^'1) investigated by AES and STM. Applied Surface Science, 2006, 253, 549-554.	3.1	10
58	New phenomenon in the channels of mesoporous silicate CMI-1: quantum size effect and two-photon absorption of ZnO nanoparticles. Applied Physics A: Materials Science and Processing, 2007, 88, 105-109.	1.1	10
59	X-ray photoemission from small mercury clusters on II-VI semiconductor surfaces. Physical Review B, 1988, 38, 1351-1356.	1.1	9
60	Control of Dipolar Switches on Graphene by a Local Electric Field. Journal of Physical Chemistry C, 2020, 124, 15639-15645.	1.5	9
61	Structural and electronic properties ofAgâ^'Pdsuperlattices. Physical Review B, 2004, 70, .	1.1	8
62	Heteroepitaxy of PbSe on GaAs(100) and GaAs(211)B by molecular beam epitaxy. Journal of Crystal Growth, 2009, 311, 2359-2362.	0.7	8
63	Direct Observation of the Reduction of a Molecule on Nitrogen Pairs in Doped Graphene. Nano Letters, 2020, 20, 6908-6913.	4.5	8
64	X-ray photoelectron spectroscopic study of the ability to monofunctionalize polymer surfaces by low energy atomic bombardment. Polymer International, 1998, 47, 474-478.	1.6	7
65	Atomically flat GaMnN by diffusion of Mn into GaN(). Superlattices and Microstructures, 2006, 40, 607-611.	1.4	7
66	Phase Transitions at the Mn/ZnO (0001Ì…) Interface Probed by High Energy X-ray Spectroscopies. Journal of Physical Chemistry C, 2012, 116, 665-670.	1.5	7
67	Surface morphology, structural and electronic properties of graphene on Ge(111) via direct deposition of solid-state carbon atoms. Thin Solid Films, 2017, 639, 84-90.	0.8	7
68	Direct transfer of the CVD-grown graphene on copper foils on SiO2 substrate under supercritical CO2 assisted-cleaning technique. Materials Today Communications, 2019, 18, 184-190.	0.9	7
69	Preparation of single phase 2H-MoTe2 films by molecular beam epitaxy. Applied Surface Science, 2020, 523, 146428.	3.1	7
70	Electronic structure of antimony from density-functional calculations and angle-resolved photoemission. Physical Review B, 1991, 44, 11023-11028.	1.1	6
71	Ion-induced densification of pvd filmsâ€"a choice of the optimum density of ion bombardment. Applied Physics A: Materials Science and Processing, 1996, 63, 399-401.	1.1	6
72	Strain Reduction in Selectively Grown CdTe by MBE on Nanopatterned Silicon on Insulator (SOI) Substrates. Journal of Electronic Materials, 2008, 37, 1255-1260.	1.0	6

#	Article	IF	Citations
73	Quantum Size Effect and very localized random laser in ZnO@mesoporous silica nanocomposite following a two-photon absorption process. Journal of Non-Crystalline Solids, 2009, 355, 1152-1156.	1.5	6
74	Structural and electronic characterization of graphene grown by chemical vapor deposition and transferred onto sapphire. Applied Surface Science, 2016, 378, 397-401.	3.1	6
75	Higher-indexed MoirÃ© patterns and surface states of MoTe2/graphene heterostructure grown by molecular beam epitaxy. Npj 2D Materials and Applications, 2022, 6, .	3.9	6
76	Physical Chemistry of the Mn/ZnO (0001Ì…) Interface Probed by Hard X-ray Photoelectron Spectroscopy. Journal of Physical Chemistry C, 2011, 115, 20603-20609.	1.5	5
77	The role of SiC as a diffusion barrier in the formation of graphene on Si(111). Diamond and Related Materials, 2016, 66, 141-148.	1.8	5
78	AFM and XPS characterization of the Si(111) surface after thermal treatment. Applied Surface Science, 1995, 90, 481-487.	3.1	4
79	Dielectric and diffusion barrier multilayer for Cu(In,Ga)Se2 solar cells integration on stainless steel sheet. Thin Solid Films, 2013, 542, 270-275.	0.8	4
80	Evidencing the need for high spatial resolution in angle-resolved photoemission experiments. Physical Review B, 2016, 93, .	1.1	4
81	ANALYTICAL INVESTIGATION OF ARCHAEOLOGICAL POWDERS FROM GÃ–LTEPE (TURKEY)*. Archaeometry, 1999, 41, 81-89.	0.6	3
82	Electronic structure of Agâ€“Pd heterostructures. Computational Materials Science, 2004, 30, 34-43.	1.4	3
83	Investigation of adhesion between molybdenum and polysilazane by XPS. Applied Surface Science, 2015, 343, 202-206.	3.1	3
84	Study of surface oxidation and recovery of clean <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si3.svg"><mml:msub><mml:mtext>MoTe</mml:mtext><mml:mn>2</mml:mn></mml:msub></mml:math> films. Surfaces and Interfaces, 2022, 28, 101681.	1.5	3
85	Novel high thermal barrier layers for flexible CIGS solar cells on stainless steel substrates. , 2011, , .		2
86	Stack of Graphene/Copper Foils/Graphene by Low-Pressure Chemical Vapor Deposition as a Thermal Interface Material. Journal of Electronic Materials, 2018, 47, 7476-7483.	1.0	0
87	Three-Dimensional Intercalated Porous Graphene on Si(111). Journal of Electronic Materials, 2018, 47, 1575-1582.	1.0	0