Vicki J Keast

List of Publications by Year in descending order

68 papers	2,076 citations	304602 22 h-index	233338 45 g-index
71 all docs	71 docs citations	71 times ranked	2800 citing authors

#	Article	IF	Citations
1	Mapping chemical and bonding information using multivariate analysis of electron energy-loss spectrum images. Ultramicroscopy, 2006, 106, 1024-1032.	0.8	261
2	Mapping surface plasmons at the nanometre scale with an electron beam. Nanotechnology, 2007, 18, 165505.	1.3	256
3	Two-Dimensional Mapping of Chemical Information at Atomic Resolution. Physical Review Letters, 2007, 99, 086102.	2.9	239
4	Electron energy-loss near-edge structure - a tool for the investigation of electronic structure on the nanometre scale. Journal of Microscopy, 2001, 203, 135-175.	0.8	175
5	Prediction of the stability of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi>M</mml:mi><mml:mrow><mml:mi>n</mml:mi><mml:mo>+</mml:mo></mml:mrow></mml:msub></mml:mrow></mml:math> from first principles. Physical Review B, 2009, 80, .	1.1	87
6	Optimizing EELS acquisition. Ultramicroscopy, 2008, 108, 837-846.	0.8	69
7	Electronic structure of GaN andInxGa1â^'xNmeasured with electron energy-loss spectroscopy. Physical Review B, 2002, 66, .	1.1	63
8	Highâ€resolution imaging of nanoparticle bimetallic catalysts supported on mesoporous silica. Catalysis Letters, 1999, 60, 113-120.	1.4	58
9	Quantification of boundary segregation in the analytical electron microscope. Journal of Microscopy, 2000, 199, 45-55.	0.8	55
10	Light Splitting in Nanoporous Gold and Silver. ACS Nano, 2012, 6, 319-326.	7.3	44
11	Quantitative TEM-based phase retrieval of MgO nano-cubes using the transport of intensity equation. Ultramicroscopy, 2008, 108, 805-815.	0.8	40
12	TDDFT Study of the Optical Absorption Spectra of Bare Gold Clusters. Journal of Physical Chemistry C, 2014, 118, 3194-3201.	1.5	40
13	Ti3GaC2 and Ti3InC2: First bulk synthesis, DFT stability calculations and structural systematics. Journal of Solid State Chemistry, 2015, 230, 418-425.	1.4	34
14	The role of plasmons and interband transitions in the color of AuAl2, AuIn2, and AuGa2. Applied Physics Letters, 2011, 99, 111908.	1.5	31
15	The sodium tungsten bronzes as plasmonic materials: fabrication, calculation and characterization. Materials Research Express, 2017, 4, 065703.	0.8	29
16	Plasmon Responses in the Sodium Tungsten Bronzes. Plasmonics, 2018, 13, 437-444.	1.8	28
17	AuAl2 and PtAl2 as potential plasmonic materials. Journal of Alloys and Compounds, 2013, 577, 581-586.	2.8	26
18	Multipolar and dark-mode plasmon resonances on drilled silver nano-triangles. Optics Express, 2015, 23, 18002.	1.7	26

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19	Corrosion processes of triangular silver nanoparticles compared to bulk silver. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	26
20	First principles calculations of the optical and plasmonic response of Au alloys and intermetallic compounds. Journal of Physics Condensed Matter, 2014, 26, 305501.	0.7	24
21	Nanoscale band gap spectroscopy on ZnO and GaN-based compounds with a monochromated electron microscope. Applied Physics Letters, 2009, 95, .	1.5	23
22	Higher Order Plasmonic Modes Excited in Ag Triangular Nanoplates by an Electron Beam. Plasmonics, 2016, 11, 1081-1086.	1.8	23
23	An introduction to the calculation of valence EELS: Quantum mechanical methods for bulk solids. Micron, 2013, 44, 93-100.	1.1	22
24	The Quest for Zero Loss: Unconventional Materials for Plasmonics. Advanced Materials, 2020, 32, e1904532.	11.1	22
25	Plasma biasing to control the growth conditions of diamond-like carbon. Surface and Coatings Technology, 2007, 201, 4628-4632.	2.2	21
26	Correlation between film structures and potential limits for hydrogen and oxygen evolutions at a-C:N film electrochemical electrodes. Carbon, 2008, 46, 663-670.	5.4	20
27	Application of EELS in Materials Science. Materials Characterization, 2012, 73, 1-7.	1.9	20
28	On the Coalescence of Nanoparticulate Gold Sinter Ink. Journal of Physical Chemistry C, 2013, 117, 11377-11384.	1.5	20
29	Electron energy-loss near edge structure (ELNES) of InGaN quantum wells. Journal of Microscopy, 2003, 210, 89-93.	0.8	19
30	TEM-based phase retrieval of pâ€“n junction wafers using the transport of intensity equation. Philosophical Magazine, 2007, 87, 3565-3578.	0.7	19
31	Dielectric function and its predicted effect on localized plasmon resonances of equiatomic Auâ€“Cu. Journal Physics D: Applied Physics, 2015, 48, 215304.	1.3	19
32	Measurement of the localized electronic structure associated with bismuth segregation to copper grain boundaries. Journal Physics D: Applied Physics, 1996, 29, 1730-1739.	1.3	18
33	TDDFT Study of the Optical Absorption Spectra of Bare and Coated Au₅₅ and Au₆₉ Clusters. Journal of Physical Chemistry C, 2011, 115, 21016-21021.	1.5	17
34	Optical properties and oxidation ofÎ±-phase Agâ€“Al thin films. Nanotechnology, 2017, 28, 095202.	1.3	16
35	New developments in electron energy loss spectroscopy. Microscopy Research and Technique, 2007, 70, 211-219.	1.2	15
36	Theoretical and experimental investigation of the W-Al-B and Mo-Al-B systems to approach bulk WAlB synthesis. Journal of the European Ceramic Society, 2021, 41, 1859-1868.	2.8	14

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37	Strategies to control the spectral properties of Auâ€“Ni thin films. Thin Solid Films, 2014, 551, 200-204.	0.8	13
38	Corrosion processes of silver nanoparticles. Applied Nanoscience (Switzerland), 2022, 12, 1859-1868.	1.6	13
39	Astigmatic intensity equation for electron microscopy based phase retrieval. Ultramicroscopy, 2007, 107, 635-643.	0.8	12
40	Applications and theoretical simulation of low-loss electron energy-loss spectra. Materials Science and Technology, 2008, 24, 651-659.	0.8	12
41	Anomalously strong plasmon resonances in aluminium bronze by modification of the electronic density-of-states. Journal of Physics Condensed Matter, 2016, 28, 405501.	0.7	12
42	Bulk scale fabrication of sodium tungsten bronze nanoparticles for applications in plasmonics. Nanotechnology, 2018, 29, 40LT02.	1.3	10
43	Crystal structures, electrical properties, and electron energy-loss spectroscopy of the sodium and potassium tetragonal tungsten bronzes. Journal of Alloys and Compounds, 2021, 868, 159200.	2.8	10
44	Atmospheric Corrosion of Silver and Silver Nanoparticles. Corrosion and Materials Degradation, 2022, 3, 221-234.	1.0	10
45	Plasmon resonances and electron phase shifts near Au nanospheres. Applied Physics Letters, 2008, 93, .	1.5	8
46	Experimental verification of the electronic structure of MgB2 using electron energy-loss spectroscopy. Applied Physics Letters, 2001, 79, 3491-3493.	1.5	7
47	The effect of vacancies on the optical properties of AuAl₂. Journal of Physics Condensed Matter, 2015, 27, 505501.	0.7	7
48	Energy-filtered phase retrieval using the transport of intensity equation. Applied Physics Letters, 2011, 99, 221905.	1.5	6
49	Compositional distributions in nanoscale metallic multilayers studied using x-ray mapping. Journal of Materials Research, 2001, 16, 2032-2038.	1.2	5
50	The electronic structure of tungsten oxide thin films prepared by pulsed cathodic arc deposition and plasma-assisted pulsed magnetron sputtering. Journal of Physics Condensed Matter, 2008, 20, 175216.	0.7	5
51	Chemical homogeneity and optical properties of individual sodium tungsten bronze nanocubes. Micron, 2020, 139, 102926.	1.1	4
52	Na x WO3 + TiO2 nanocomposites as plasmonic photocatalysts for the degradation of organic dyes. Nano Express, 2020, 1, 020008.	1.2	4
53	Measurements of composition and electronic structure in an operating light-emitting diode using analytical electron microscopy. Applied Physics Letters, 2004, 84, 1371-1373.	1.5	3
54	Theoretical interpretation of electron energy-loss spectroscopic images. AIP Conference Proceedings, 2008, , .	0.3	3

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55	Plasmonic enhancement of aqueous processed organic photovoltaics. RSC Advances, 2021, 11, 19000-19011.	1.7	3
56	Gender Bias in New South Wales Higher School Certificate (HSC) Physics. Australian Journal of Education, 2022, 66, 26-39.	0.9	3
57	Single-Walled Carbon Nanotubes as One-Dimensional Scattering Surfaces for Measuring Point Spread Functions and Performance of Tip-Enhanced Raman Spectroscopy Probes. ACS Applied Nano Materials, 2022, 5, 9024-9033.	2.4	3
58	Intermediate Phases and Reaction Kinetics of the Furnace-Assisted Synthesis of Sodium Tungsten Bronze Nanoparticles. Journal of Physical Chemistry C, 2021, 125, 8185-8194.	1.5	2
59	Calculating EELS. , 2016, , 405-423.		1
60	Electron Energy Loss Spectroscopy (EELS) of GaN Alloys and Quantum Wells. Microscopy and Microanalysis, 2001, 7, 1182-1183.	0.2	1
61	Electronic Structure, Charge Transfer and Bonding in Intermetallics Using EELS and Density Functional Theory. Materials Research Society Symposia Proceedings, 1998, 552, 1.	0.1	0
62	Quantification Of Segregation Levels Using Xeds In The Stem. Microscopy and Microanalysis, 1999, 5, 146-147.	0.2	0
63	X-Ray Mapping of Bimetallic Catalysts in Mesoporous Silica. Microscopy and Microanalysis, 1999, 5, 622-623.	0.2	0
64	Tailoring Grain-Boundary Segregation to Control Mechanical Properties. Materials Research Society Symposia Proceedings, 1999, 586, 125.	0.1	0
65	The Effect of the Buffer Layer on the Structure, Mobility and Photoluminescence of MBE grown GaN. Materials Research Society Symposia Proceedings, 1999, 595, 1.	0.1	0
66	Bandstructure Calculations for the Simulation of Low-Loss EELS and Plasmon Energies. Microscopy and Microanalysis, 2004, 10, 854-855.	0.2	0
67	The Role of Simulation of Valence Electron Energy Loss Spectroscopy (EELS) for Understanding Electronic Structure and Optical Properties of Materials. Microscopy and Microanalysis, 2019, 25, 2286-2287.	0.2	0
68	STEM investigation of the chemistry and bonding changes associated with the grain boundary embrittlement of Cu by Bi. Proceedings Annual Meeting Electron Microscopy Society of America, 1996, 54, 526-527.	0.0	0