Pekka Koskinen

List of Publications by Year in descending order

72 papers	4,742 citations	218592 26 h-index	95218 68 g-index
73 all docs	73 docs citations	73 times ranked	5773 citing authors

#	Article	IF	Citations
1	Ultrastiff graphene. Npj 2D Materials and Applications, 2021, 5, .	3.9	9
2	What do we do when we analyse the temporal aspects of computer-supported collaborative learning? A systematic literature review. Educational Research Review, 2021, 33, 100387.	4.1	26
3	Limits of lateral expansion in two-dimensional materials with line defects. Physical Review Materials, 2021, 5, .	0.9	1
4	The potential of temporal analysis: Combining log data and lag sequential analysis to investigate temporal differences between scaffolded and non-scaffolded group inquiry-based learning processes. Computers and Education, 2020, 143, 103674.	5.1	20
5	Rippling of two-dimensional materials by line defects. Physical Review B, 2020, 102, .	1.1	5
6	Free-standing 2D metals from binary metal alloys. AIP Advances, 2020, 10, 065327.	0.6	12
7	Making Graphene Luminescent by Direct Laser Writing. Journal of Physical Chemistry C, 2020, 124, 8371-8377.	1.5	11
8	Stability limits of elemental 2D metals in graphene pores. Nanoscale, 2019, 11, 22019-22024.	2.8	27
9	Atlas for the properties of elemental two-dimensional metals. Physical Review B, 2018, 97, .	1.1	75
10	Primetime learning: collaborative and technology-enhanced studying with genuine teacher presence. International Journal of STEM Education, 2018, 5, 20.	2.7	12
11	Beyond ideal two-dimensional metals: Edges, vacancies, and polarizabilities. Physical Review B, 2018, 98, .	1.1	13
12	Optically Forged Diffraction-Unlimited Ripples in Graphene. Journal of Physical Chemistry Letters, 2018, 9, 6179-6184.	2.1	10
13	Visualising the temporal aspects of collaborative inquiry-based learning processes in technology-enhanced physics learning. International Journal of Science Education, 2018, 40, 1697-1717.	1.0	24
14	Growth of two-dimensional Au patches in graphene pores: A density-functional study. Computational Materials Science, 2017, 131, 120-125.	1.4	22
15	Self-Consistent Charge Density-Functional Tight-Binding Parametrization for Ptâ€“Ru Alloys. Journal of Physical Chemistry A, 2017, 121, 2497-2502.	1.1	23
16	Optical Forging of Graphene into Three-Dimensional Shapes. Nano Letters, 2017, 17, 6469-6474.	4.5	29
17	From Seeds to Islands: Growth of Oxidized Graphene by Two-Photon Oxidation. Journal of Physical Chemistry C, 2016, 120, 22330-22341.	1.5	21
18	Quantum Simulations of One-Dimensional Nanostructures under Arbitrary Deformations. Physical Review Applied, 2016, 6, .	1.5	8

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19	Limits of stability in supported graphene nanoribbons subject to bending. Physical Review B, 2016, 93, .	1.1	5
20	Peeling of multilayer graphene creates complex interlayer sliding patterns. Physical Review B, 2015, 92, .	1.1	23
21	Plenty of motion at the bottom: atomically thin liquid gold membrane. Nanoscale, 2015, 7, 10140-10145.	2.8	31
22	Real-space Wigner-Seitz Cells Imaging of Potassium on Graphite via Elastic Atomic Manipulation. Scientific Reports, 2015, 5, 8276.	1.6	8
23	Simple metal under tensile stress: layer-dependent herringbone reconstruction of thin potassium films on graphite. Scientific Reports, 2015, 5, 10165.	1.6	5
24	Curvature in graphene nanoribbons generates temporally and spatially focused electric currents. Nanoscale, 2015, 7, 8627-8635.	2.8	17
25	Electromechanics of graphene spirals. AIP Advances, 2014, 4, 127125.	0.6	21
26	Graphene cardboard: From ripples to tunable metamaterial. Applied Physics Letters, 2014, 104, .	1.5	16
27	Nanomechanical cleavage of molybdenum disulphide atomic layers. Nature Communications, 2014, 5, 3631.	5.8	144
28	Optical and electronic properties of graphene nanoribbons upon adsorption of ligand-protected aluminum clusters. Physical Chemistry Chemical Physics, 2014, 16, 3558.	1.3	22
29	Density-Functional Tight-Binding Simulations of Curvature-Controlled Layer Decoupling and Band-Gap Tuning in Bilayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoS</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2014, 112, 186802.	2.9	36
30	Electronic structure trends of MÃ¶bius graphene nanoribbons from minimal-cell simulations. Computational Materials Science, 2014, 81, 264-268.	1.4	6
31	Topological Signatures in the Electronic Structure of Graphene Spirals. Scientific Reports, 2013, 3, 1632.	1.6	36
32	Modeling thiolate-protected gold clusters with density-functional tight-binding. European Physical Journal D, 2013, 67, 1.	0.6	26
33	Li+ adsorption at prismatic graphite surfaces enhances interlayer cohesion. Journal of Power Sources, 2013, 239, 321-325.	4.0	10
34	Bending-induced delamination of van der Waals solids. Journal of Physics Condensed Matter, 2013, 25, 395303.	0.7	16
35	Electron quantization in arbitrarily shaped gold islands on MgO thin films. Physical Review B, 2013, 88, .	1.1	26
36	Edge-stress-induced spontaneous twisting of graphene nanoribbons. Journal of Applied Physics, 2012, 111, 054302.	1.1	21

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37	Graphene nanoribbons subject to gentle bends. Physical Review B, 2012, 85, .	1.1	25
38	Twisting graphene nanoribbons into carbon nanotubes. Physical Review B, 2012, 85, .	1.1	75
39	Revised periodic boundary conditions: Fundamentals, electrostatics, and the tight-binding approximation. Physical Review B, 2011, 84, .	1.1	17
40	Electromechanics of twisted graphene nanoribbons. Applied Physics Letters, 2011, 99, .	1.5	39
41	Production Lots as Determinant of Paper Production Lead Time Performance. , 2011, , 310-325.		0
42	Exploring the graphene edges with coherent electron focusing. Physical Review B, 2010, 81, .	1.1	36
43	Electronic and optical properties of carbon nanotubes under pure bending. Physical Review B, 2010, 82, .	1.1	21
44	Structural, chemical, and dynamical trends in graphene grain boundaries. Physical Review B, 2010, 81, .	1.1	184
45	Approximate modeling of spherical membranes. Physical Review B, 2010, 82, .	1.1	84
46	Efficient Approach for Simulating Distorted Materials. Physical Review Letters, 2010, 105, 106401.	2.9	24
47	Characterizing low-coordinated atoms at the periphery of MgO-supported Au islands using scanning tunneling microscopy and electronic structure calculations. Physical Review B, 2010, 81, .	1.1	67
48	Production Lots as Determinant of Paper Production Lead Time Performance. International Journal of Information Systems and Supply Chain Management, 2009, 2, 63-79.	0.6	2
49	Bright Beaches of Nanoscale Potassium Islands on Graphite in STM Imaging. Physical Review Letters, 2009, 102, 106102.	2.9	18
50	Comparison of Raman spectra and vibrational density of states between graphene nanoribbons with different edges. European Physical Journal D, 2009, 52, 71-74.	0.6	31
51	Supply chain strategy in a global paper manufacturing company: a case study. Industrial Management and Data Systems, 2009, 109, 34-52.	2.2	19
52	Density-functional tight-binding for beginners. Computational Materials Science, 2009, 47, 237-253.	1.4	324
53	Evidence for graphene edges beyond zigzag and armchair. Physical Review B, 2009, 80, .	1.1	274
54	Gold in graphene: In-plane adsorption and diffusion. Applied Physics Letters, 2009, 94, .	1.5	93

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55	Understanding the microscopic processes that govern the charge-induced deformation of carbon nanotubes. Physical Review B, 2009, 80, .	1.1	11
56	Self-Passivating Edge Reconstructions of Graphene. Physical Review Letters, 2008, 101, 115502.	2.9	674
57	Raman spectra of single-walled carbon nanotubes with vacancies. Physical Review B, 2008, 77, .	1.1	26
58	Effect of bending on Raman-active vibration modes of carbon nanotubes. Physical Review B, 2008, 78, .	1.1	21
59	Supply chain challenges of Northâ€European paper industry. Industrial Management and Data Systems, 2008, 108, 208-227.	2.2	30
60	Liquid-Liquid Phase Coexistence in Gold Clusters: 2D or Not 2D?. Physical Review Letters, 2007, 98, 015701.	2.9	62
61	Size-Dependent Structural Evolution and Chemical Reactivity of Gold Clusters. ChemPhysChem, 2007, 8, 157-161.	1.0	197
62	Density-functional based tight-binding study of small gold clusters. New Journal of Physics, 2006, 8, 9-9.	1.2	72
63	Structural Relaxation Made Simple. Physical Review Letters, 2006, 97, 170201.	2.9	1,189
64	Oxidation of magnesia-supported Pd-clusters leads to the ultimate limit of epitaxy with a catalytic function. Nature Materials, 2006, 5, 44-47.	13.3	55
65	Charge fluctuations in coupled systems: Ring coupled to a wire or ring. Physical Review B, 2005, 72, .	1.1	2
66	Quantum rings for beginners: energy spectra and persistent currents. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 1-35.	1.3	210
67	Four-wave mixing in coupled semiconductor quantum dots. Solid State Communications, 2003, 125, 529-532.	0.9	1
68	Single scatterings in single artificial atoms: Quantum coherence and entanglement. Physical Review B, 2003, 68, .	1.1	7
69	Persistent currents in small, imperfect Hubbard rings. Physical Review B, 2003, 68, .	1.1	12
70	Tight-Binding Model for Spontaneous Magnetism of Quantum Dot Lattices. Physica Scripta, 2003, 68, 74-78.	1.2	5
71	Fractional periodicity of persistent currents: A signature of broken internal symmetry. Europhysics Letters, 2003, 63, 846-852.	0.7	7
72	Low-energy spectrum and finite temperature properties of quantum rings. European Physical Journal B, 2002, 28, 483-489.	0.6	11