Pekka Koskinen

List of Publications by Year
in descending order

72	4,742	218677	95266
papers	citations	26 h-index	68 g-index

73	73	73	5773
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Structural Relaxation Made Simple. Physical Review Letters, 2006, 97, 170201.	7.8	1,189
2	Self-Passivating Edge Reconstructions of Graphene. Physical Review Letters, 2008, 101, 115502.	7.8	674
3	Density-functional tight-binding for beginners. Computational Materials Science, 2009, 47, 237-253.	3.0	324
4	Evidence for graphene edges beyond zigzag and armchair. Physical Review B, 2009, 80, .	3.2	274
5	Quantum rings for beginners: energy spectra and persistent currents. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 21, 1-35.	2.7	210
6	Size-Dependent Structural Evolution and Chemical Reactivity of Gold Clusters. ChemPhysChem, 2007, 8, 157-161.	2.1	197
7	Structural, chemical, and dynamical trends in graphene grain boundaries. Physical Review B, 2010, 81, .	3.2	184
8	Nanomechanical cleavage of molybdenum disulphide atomic layers. Nature Communications, 2014, 5, 3631.	12.8	144
9	Gold in graphene: In-plane adsorption and diffusion. Applied Physics Letters, 2009, 94, .	3.3	93
10	Approximate modeling of spherical membranes. Physical Review B, 2010, 82, .	3.2	84
11	Twisting graphene nanoribbons into carbon nanotubes. Physical Review B, 2012, 85, .	3.2	75
12	Atlas for the properties of elemental two-dimensional metals. Physical Review B, 2018, 97, .	3.2	75
13	Density-functional based tight-binding study of small gold clusters. New Journal of Physics, 2006, 8, 9-9.	2.9	72
14	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, .	3.2	67
15	Liquid-Liquid Phase Coexistence in Gold Clusters: 2D or Not 2D?. Physical Review Letters, 2007, 98, 015701.	7.8	62
16	Oxidation of magnesia-supported Pd-clusters leads to the ultimate limit of epitaxy with a catalytic function. Nature Materials, 2006, 5, 44-47.	27.5	55
17	Electromechanics of twisted graphene nanoribbons. Applied Physics Letters, 2011, 99, .	3.3	39
18	Exploring the graphene edges with coherent electron focusing. Physical Review B, 2010, 81, .	3.2	36

#	Article	IF	Citations
19	Topological Signatures in the Electronic Structure of Graphene Spirals. Scientific Reports, 2013, 3, 1632.	3.3	36
20	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.	7.8	36
21	Comparison of Raman spectra and vibrational density of states between graphene nanoribbons with different edges. European Physical Journal D, 2009, 52, 71-74.	1.3	31
22	Plenty of motion at the bottom: atomically thin liquid gold membrane. Nanoscale, 2015, 7, 10140-10145.	5.6	31
23	Supply chain challenges of Northâ€European paper industry. Industrial Management and Data Systems, 2008, 108, 208-227.	3.7	30
24	Optical Forging of Graphene into Three-Dimensional Shapes. Nano Letters, 2017, 17, 6469-6474.	9.1	29
25	Stability limits of elemental 2D metals in graphene pores. Nanoscale, 2019, 11, 22019-22024.	5.6	27
26	Raman spectra of single-walled carbon nanotubes with vacancies. Physical Review B, 2008, 77, .	3.2	26
27	Modeling thiolate-protected gold clusters with density-functional tight-binding. European Physical Journal D, 2013, 67, 1.	1.3	26
28	Electron quantization in arbitrarily shaped gold islands on MgO thin films. Physical Review B, 2013, 88, .	3.2	26
29	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.	7.8	26
30	Graphene nanoribbons subject to gentle bends. Physical Review B, 2012, 85, .	3.2	25
31	Efficient Approach for Simulating Distorted Materials. Physical Review Letters, 2010, 105, 106401.	7.8	24
32	Visualising the temporal aspects of collaborative inquiry-based learning processes in technology-enhanced physics learning. International Journal of Science Education, 2018, 40, 1697-1717.	1.9	24
33	Peeling of multilayer graphene creates complex interlayer sliding patterns. Physical Review B, 2015, 92, .	3.2	23
34	Self-Consistent Charge Density-Functional Tight-Binding Parametrization for Ptâ€“Ru Alloys. Journal of Physical Chemistry A, 2017, 121, 2497-2502.	2.5	23
35	Optical and electronic properties of graphene nanoribbons upon adsorption of ligand-protected aluminum clusters. Physical Chemistry Chemical Physics, 2014, 16, 3558.	2.8	22
36	Growth of two-dimensional Au patches in graphene pores: A density-functional study. Computational Materials Science, 2017, 131, 120-125.	3.0	22

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37	Effect of bending on Raman-active vibration modes of carbon nanotubes. Physical Review B, 2008, 78, .	3.2	21
38	Electronic and optical properties of carbon nanotubes under pure bending. Physical Review B, 2010, 82, .	3.2	21
39	Edge-stress-induced spontaneous twisting of graphene nanoribbons. Journal of Applied Physics, 2012, 111, 054302.	2.5	21
40	Electromechanics of graphene spirals. AIP Advances, 2014, 4, 127125.	1.3	21
41	From Seeds to Islands: Growth of Oxidized Graphene by Two-Photon Oxidation. Journal of Physical Chemistry C, 2016, 120, 22330-22341.	3.1	21
42	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.	8.3	20
43	Supply chain strategy in a global paper manufacturing company: a case study. Industrial Management and Data Systems, 2009, 109, 34-52.	3.7	19
44	Bright Beaches of Nanoscale Potassium Islands on Graphite in STM Imaging. Physical Review Letters, 2009, 102, 106102.	7.8	18
45	Revised periodic boundary conditions: Fundamentals, electrostatics, and the tight-binding approximation. Physical Review B, 2011, 84, .	3.2	17
46	Curvature in graphene nanoribbons generates temporally and spatially focused electric currents. Nanoscale, 2015, 7, 8627-8635.	5.6	17
47	Bending-induced delamination of van der Waals solids. Journal of Physics Condensed Matter, 2013, 25, 395303.	1.8	16
48	Graphene cardboard: From ripples to tunable metamaterial. Applied Physics Letters, 2014, 104, .	3.3	16
49	Beyond ideal two-dimensional metals: Edges, vacancies, and polarizabilities. Physical Review B, 2018, 98, .	3.2	13
50	Persistent currents in small, imperfect Hubbard rings. Physical Review B, 2003, 68, .	3.2	12
51	Primetime learning: collaborative and technology-enhanced studying with genuine teacher presence. International Journal of STEM Education, 2018, 5, 20.	5.0	12
52	Free-standing 2D metals from binary metal alloys. AIP Advances, 2020, 10, 065327.	1.3	12
53	Low-energy spectrum and finite temperature properties of quantum rings. European Physical Journal B, 2002, 28, 483-489.	1.5	11
54	Understanding the microscopic processes that govern the charge-induced deformation of carbon nanotubes. Physical Review B, 2009, 80, .	3.2	11

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55	Making Graphene Luminescent by Direct Laser Writing. Journal of Physical Chemistry C, 2020, 124, 8371-8377.	3.1	11
56	Li+ adsorption at prismatic graphite surfaces enhances interlayer cohesion. Journal of Power Sources, 2013, 239, 321-325.	7.8	10
57	Optically Forged Diffraction-Unlimited Ripples in Graphene. Journal of Physical Chemistry Letters, 2018, 9, 6179-6184.	4.6	10
58	Ultrastiff graphene. Npj 2D Materials and Applications, 2021, 5, .	7.9	9
59	Real-space Wigner-Seitz Cells Imaging of Potassium on Graphite via Elastic Atomic Manipulation. Scientific Reports, 2015, 5, 8276.	3.3	8
60	Quantum Simulations of One-Dimensional Nanostructures under Arbitrary Deformations. Physical Review Applied, 2016, 6, .	3.8	8
61	Single scatterings in single artificial atoms: Quantum coherence and entanglement. Physical Review B, 2003, 68, .	3.2	7
62	Fractional periodicity of persistent currents: A signature of broken internal symmetry. Europhysics Letters, 2003, 63, 846-852.	2.0	7
63	Electronic structure trends of MÃ¶bius graphene nanoribbons from minimal-cell simulations. Computational Materials Science, 2014, 81, 264-268.	3.0	6
64	Tight-Binding Model for Spontaneous Magnetism of Quantum Dot Lattices. Physica Scripta, 2003, 68, 74-78.	2.5	5
65	Simple metal under tensile stress: layer-dependent herringbone reconstruction of thin potassium films on graphite. Scientific Reports, 2015, 5, 10165.	3.3	5
66	Limits of stability in supported graphene nanoribbons subject to bending. Physical Review B, 2016, 93, .	3.2	5
67	Rippling of two-dimensional materials by line defects. Physical Review B, 2020, 102, .	3.2	5
68	Charge fluctuations in coupled systems: Ring coupled to a wire or ring. Physical Review B, 2005, 72, .	3.2	2
69	Production Lots as Determinant of Paper Production Lead Time Performance. International Journal of Information Systems and Supply Chain Management, 2009, 2, 63-79.	0.9	2
70	Four-wave mixing in coupled semiconductor quantum dots. Solid State Communications, 2003, 125, 529-532.	1.9	1
71	Limits of lateral expansion in two-dimensional materials with line defects. Physical Review Materials, 2021, 5, .	2.4	1
72	Production Lots as Determinant of Paper Production Lead Time Performance. , 2011, , 310-325.		0