Richard Taylor

List of Publications by Year
in descending order

71 papers	1,061 citations	567281 15 h-index	434195 31 g-index
75 all docs	75 docs citations	75 times ranked	730 citing authors

#	Article	IF	Citations
1	Fractal dimension of landscape silhouette outlines as a predictor of landscape preference. Journal of Environmental Psychology, 2004, 24, 247-255.	5.1	220
2	Reduction of Physiological Stress Using Fractal Art and Architecture. Leonardo, 2006, 39, 245-251.	0.3	92
3	Authenticating Pollock paintings using fractal geometry. Pattern Recognition Letters, 2007, 28, 695-702.	4.2	91
4	Quantum ratchets and quantum heat pumps. Applied Physics A: Materials Science and Processing, 2002, 75, 237-246.	2.3	85
5	Universal conductance fluctuations in the magnetoresistance of submicron-size n+-GaAs wires and laterally confined nâˆ'-GaAs/(AlGa)As heterostructures. Surface Science, 1988, 196, 52-58.	1.9	54
6	Fractals in architecture: The visual interest, preference, and mood response to projected fractal light patterns in interior spaces. Journal of Environmental Psychology, 2019, 61, 57-70.	5.1	41
7	A Complex Story: Universal Preference vs. Individual Differences Shaping Aesthetic Response to Fractals Patterns. Frontiers in Human Neuroscience, 2016, 10, 213.	2.0	37
8	The Potential of Biophilic Fractal Designs to Promote Health and Performance: A Review of Experiments and Applications. Sustainability, 2021, 13, 823.	3.2	33
9	Quantum transport in open mesoscopic cavities. Chaos, Solitons and Fractals, 1997, 8, 1299-1324.	5.1	32
10	Fractal Expressionismâ€"Where Art Meets Science. , 2003, , 117-144.		30
11	The effect of coulomb interactions on the magnetoconductance oscillations of quantum dots. Solid State Communications, 1992, 84, 631-634.	1.9	22
12	Science in culture. Nature, 2001, 410, 18-18.	27.8	22
13	Self-similar conductance fluctuations in a Sinai billiard with a mixed chaotic phase space. Physica B: Condensed Matter, 1998, 249-251, 334-338.	2.7	17
14	Relationship between Fractal Dimension and Spectral Scaling Decay Rate in Computer-Generated Fractals. Symmetry, 2016, 8, 66.	2.2	17
15	Assessing the Visual Comfort, Visual Interest of Sunlight Patterns, and View Quality under Different Window Conditions in an Open-Plan Office. LEUKOS - Journal of Illuminating Engineering Society of North America, 2021, 17, 321-337.	2.9	17
16	Universal conductance fluctuations in the magnetoresistance of submicron n+GaAs wires. Superlattices and Microstructures, 1986, 2, 381-383.	3.1	16
17	Classical and quantum transmission effects in submicron-size dots. Surface Science, 1992, 263, 247-252.	1.9	16
18	Australian national pulsed magnet laboratory for condensed matter physics research. Physica B: Condensed Matter, 1994, 201, 565-571.	2.7	14

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19	The Abstract Expressionists and Les Automatistes: A shared multi-fractal depth?. Signal Processing, 2013, 93, 573-578.	3.7	14
20	NSF Program Benefits Schools in Need. Science, 2011, 332, 173-174.	12.6	13
21	The extreme quantum regime of 2D electron and hole systems. Physica B: Condensed Matter, 1994, 201, 301-314.	2.7	12
22	Fractal images induce fractal pupil dilations and constrictions. International Journal of Psychophysiology, 2014, 93, 316-321.	1.0	12
23	Is it the boundaries or disorder that dominates electron transport in semiconductor `billiards'?. Fortschritte Der Physik, 2013, 61, 332-347.	4.4	11
24	Experimental investigation of quantum point contacts separated by open and enclosed regions. Superlattices and Microstructures, 1992, 11, 219-222.	3.1	10
25	Investigation of the current injection properties of ohmic spikes in nanostructures. Superlattices and Microstructures, 1998, 24, 337-345.	3.1	10
26	Temperature dependent fractal dimension of magneto-conductance fluctuations in semiconductor billiards. Superlattices and Microstructures, 1999, 25, 157-161.	3.1	8
27	A physical explanation for the origin of self-similar magnetoconductance fluctuations in semiconductor billiards. Physica E: Low-Dimensional Systems and Nanostructures, 2000, 7, 726-730.	2.7	7
28	Quantum ratchets act as heat pumps. Physica B: Condensed Matter, 2002, 314, 464-468.	2.7	7
29	Electron heating in a submicron-size n+ GaAs wire. Superlattices and Microstructures, 1989, 5, 575-578.	3.1	6
30	Fabrication and characterisation of multi-level lateral nano-devices. Surface Science, 1994, 305, 648-653.	1.9	6
31	The role of lead openings in regular mesoscopic billiards. Superlattices and Microstructures, 1996, 20, 287-295.	3.1	6
32	Vision of beauty. Physics World, 2011, 24, 22-27.	0.0	6
33	The topological transition from a Corbino to Hall bar geometry. Superlattices and Microstructures, 1996, 20, 651-656.	3.1	5
34	The influence of confining wall profile on quantum interference effects in etched Ga0.25In0.75As/InP billiards. Superlattices and Microstructures, 2003, 34, 179-184.	3.1	5
35	Anti-collimation of ballistic electrons by a potential barrier. Surface Science, 1994, 305, 448-452.	1.9	4
36	Personal reflections on Jackson Pollock's fractal paintings. Historia, Ciencias, Saude - Manguinhos, 2006, 13, 109-123.	0.2	4

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37	Collimation effects in quantum point contacts. Physica B: Condensed Matter, 1991, 175, 243-246.	2.7	3
38	Electron-electron interactions and the magnetoconductance of submicron quantum dots. Surface Science, 1994, 305, 527-535.	1.9	3
39	Geometry induced quantum interference: a continuous evolution from square to Sinai billiard. Superlattices and Microstructures, 1996, 20, 297-305.	3.1	3
40	Aharonovâ€"Bohm oscillations in quantum dots: precise departures fromh/eperiodicity. Superlattices and Microstructures, 1997, 22, 57-63.	3.1	3
41	Wave function scarring and magnetotransport in quantum dots. Physica B: Condensed Matter, 1998, 249-251, 353-357.	2.7	3
42	A fascination with fractals. Physics World, 2013, 26, 37-41.	0.0	3
43	Mesoscopic charge mapping by conductance fluctuations. Physica B: Condensed Matter, 1990, 165-166, 865-866.	2.7	2
44	A tunable ballistic electron cavity exhibiting geometry-induced weak localisation. Superlattices and Microstructures, 1994, 16, 317-320.	3.1	2
45	Density of electrons in a lateral quantum dot by semi-classical trajectory analysis. Solid State Communications, 1994, 89, 579-582.	1.9	2
46	Transition from chaotic to regular quantum scattering in mesoscopic billiards with nominally regular geometry. Physica B: Condensed Matter, 1996, 227, 148-151.	2.7	2
47	Experimental and theoretical investigations of clusters in the magneto-fingerprints of Sinai billiards. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1998, 51, 212-215.	3.5	2
48	Chaotic ray dynamics and fast optical switching in micro-cavities with a graded refractive index. Physica B: Condensed Matter, 1999, 272, 484-487.	2.7	2
49	Quantum conductance fluctuations in semiconductor devices. Current Applied Physics, 2008, 8, 332-335.	2.4	2
50	Carrier density saturation in a heterostructure. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1754-1756.	2.7	2
51	Temperature and angular dependence of magnetoresistance oscillations in a 2deg subjected to a periodic potential. Physica B: Condensed Matter, 1990, 165-166, 867-868.	2.7	1
52	Electronic properties of laterally confined n-GaAs/(AlGa)As heterostructures. Surface Science, 1990, 228, 296-300.	1.9	1
53	The dependence of fractal conductance fluctuations on soft-wall profile in a double-2DEG billiard. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 12, 841-844.	2.7	1
54	Discrete energy level spectrum dependence of fractal conductance fluctuations in semiconductor billiards. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 683-686.	2.7	1

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55	A novel quantum interference probe of the energy spectrum of coupled nanodevices. Current Applied Physics, 2006, 6, 541-544.	2.4	1
56	Measuring hybridization in GaInAs/InP electron billiard arrays. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 1205-1207.	2.7	1
57	Collimation effects in quantum point contacts. Physica B: Condensed Matter, 1992, 176, 334.	2.7	0
58	Demonstration of intricate gate, Ohmic and interconnect metallizations for nanostructure construction. Superlattices and Microstructures, 1994, 15, 85.	3.1	0
59	Jack the dripper: chaos in modern art?. Physics World, 1997, 10, 76-76.	0.0	0
60	Geometry-induced fractal behaviour:. Physica B: Condensed Matter, 1998, 249-251, 343-347.	2.7	0
61	Physical realisation of Weierstrass scaling using a quantum interferometer. Superlattices and Microstructures, 1999, 25, 207-211.	3.1	0
62	Temperature and size dependence of fractal MCF in semiconductor billiards. Microelectronic Engineering, 2000, 51-52, 241-247.	2.4	0
63	Generic fractal behaviour of ballistic devices. , 0, , .		0
64	The dependence of fractal conductance fluctuations on semiconductor billiard parameters. Physica B: Condensed Matter, 2002, 314, 477-480.	2.7	0
65	Surviving conduction symmetries in non-linear response. Superlattices and Microstructures, 2003, 34, 173-177.	3.1	0
66	Geometry-independence of fractal ballistic processes. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 19, 225-229.	2.7	0
67	Series summation of fractal fluctuations in electron billiard arrays. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 600-603.	2.7	0
68	Chaotic scattering in nano-electronic systems: from billiards to clusters. International Journal of Nanotechnology, 2009, 6, 408.	0.2	0
69	Coming soon to a field near you. Physics World, 2011, 24, 26-31.	0.0	0
70	The influence of small-angle scattering on ballistic transport in quantum dots. , 2012, , .		0
71	Contributed Session III: Phenomenological Assessment of Dynamic Fractals. Journal of Vision, 2022, 22, 39.	0.3	0