Ulrich Kuhl

List of Publications by Citations

98 papers	3,156 citations	28 h-index	54 g-index
105 ext. papers	3,790 ext. citations	5.7 avg, IF	5.26 L-index

#	Paper	IF	Citations
98	Dynamically encircling an exceptional point for asymmetric mode switching. *Nature*, **2016**, 537, 76-79	50.4	414
97	Selective enhancement of topologically induced interface states in a dielectric resonator chain. *Nature Communications*, **2015**, 6, 6710	17.4	299
96	Experimental observation of the mobility edge in a waveguide with correlated disorder. *Applied Physics Letters*, **2000**, 77, 633-635	3.4	185
95	Freak waves in the linear regime: a microwave study. *Physical Review Letters*, **2010**, 104, 093901	7.4	144
94	Topological transition of Dirac points in a microwave experiment. *Physical Review Letters*, **2013**, 110, 033902	7.4	111
93	First experimental realization of the Dirac oscillator. *Physical Review Letters*, **2013**, 111, 170405	7.4	100
92	Microwave Realization of the Hofstadter Butterfly. *Physical Review Letters*, **1998**, 80, 3232-3235	7.4	86
91	Tight-binding couplings in microwave artificial graphene. *Physical Review B*, **2013**, 88,	3.3	77
90	Direct processes in chaotic microwave cavities in the presence of absorption. *Physical Review Letters*, **2005**, 94, 144101	7.4	75
89	Enhancement of localization in one-dimensional random potentials with long-range correlations. *Physical Review Letters*, **2008**, 100, 126402	7.4	73
88	Distribution of reflection coefficients in absorbing chaotic microwave cavities. *Physical Review Letters*, **2003**, 91, 174102	7.4	71
87	Classical wave experiments on chaotic scattering. *Journal of Physics A*, **2005**, 38, 10433-10463		70
86	Dynamical tunneling in mushroom billiards. *Physical Review Letters*, **2008**, 100, 174103	7.4	68
85	Dirac point and edge states in a microwave realization of tight-binding graphene-like structures. *Physical Review B*, **2010**, 82,	3.3	64
84	Effective Hamiltonian for a microwave billiard with attached waveguide. *Physical Review E*, **2002**, 65, 066211	2.4	57
83	Scarred and Chaotic Field Distributions in a Three-Dimensional Sinai-Microwave Resonator. *Physical Review Letters*, **1998**, 80, 1030-1033	7.4	56
82	Probing decoherence through Fano resonances. *Physical Review Letters*, **2010**, 105, 056801	7.4	51

81	Random anti-lasing through coherent perfect absorption in a disordered medium. *Nature*, **2019**, 567, 351-355	50.4	50
80	Resonance widths in open microwave cavities studied by harmonic inversion. *Physical Review Letters*, **2008**, 100, 254101	7.4	50
79	Global versus Local Billiard Level Dynamics: The Limits of Universality. *Physical Review Letters*, **1999**, 82, 2026-2029	7.4	44
78	Tunable Fano resonances in transport through microwave billiards. *Physical Review E*, **2004**, 69, 046208	2.4	43
77	Manipulation of edge states in microwave artificial graphene. *New Journal of Physics*, **2014**, 16, 113023	2.9	38
76	One dimensional Kronig-Penney model with positional disorder: Theory versus experiment. *Physical Review B*, **2009**, 80,	3.3	34
75	Measurement of long-range wave-function correlations in an open microwave billiard. *Physical Review Letters*, **2005**, 94, 036804	7.4	34
74	Partial chiral symmetry-breaking as a route to spectrally isolated topological defect states in two-dimensional artificial materials. *2D Materials*, **2017**, 4, 025008	5.9	31
73	Microwave Realization of the Gaussian Symplectic Ensemble. *Physical Review Letters*, **2016**, 117, 064101	7.4	31
72	Experimental Width Shift Distribution: A Test of Nonorthogonality for Local and Global Perturbations. *Physical Review Letters*, **2014**, 113, 224101	7.4	30
71	Mixing of wavefunctions in rectangular microwave billiards. *European Physical Journal B*, **2000**, 17, 253-259	1.2	29
70	Experimental observation of the spectral gap in microwave n-disk systems. *Physical Review Letters*, **2013**, 110, 164102	7.4	26
69	Correlations of electromagnetic fields in chaotic cavities. *Europhysics Letters*, **1999**, 46, 134-140	1.6	26
68	Experimental verification of topologically induced vortices inside a billiard. *Journal of Physics A*, **1999**, 32, 8225-8230		26
67	Disordered graphene and boron nitride in a microwave tight-binding analog. *Physical Review B*, **2013**, 87,	3.3	25
66	Focusing inside Disordered Media with the Generalized Wigner-Smith Operator. *Physical Review Letters*, **2017**, 119, 033903	7.4	25
65	Microwave fidelity studies by varying antenna coupling. *Physical Review E*, **2010**, 82, 036207	2.4	24
64	Microwave experiments using open chaotic cavities in the realm of the effective Hamiltonian formalism. *Fortschritte Der Physik*, **2013**, 61, 404-419	5.7	23

63	Experimental observation of a fundamental length scale of waves in random media. *Physical Review Letters*, **2013**, 111, 183902	7.4	23
62	Spectral properties of microwave graphs with local absorption. *Physical Review E*, **2014**, 89, 022925	2.4	23
61	Wave functions, nodal domains, flow, and vortices in open microwave systems. *European Physical Journal: Special Topics*, **2007**, 145, 103-123	2.3	23
60	Microwave experiments simulating quantum search and directed transport in artificial graphene. *Physical Review Letters*, **2015**, 114, 110501	7.4	22
59	Experimental Observation of Resonance-Assisted Tunneling. *Physical Review Letters*, **2015**, 115, 104101	7.4	21
58	Weyl asymptotics: from closed to open systems. *Physical Review E*, **2012**, 86, 066205	2.4	21
57	Microwave realization of quasi-one-dimensional systems with correlated disorder. *Physical Review B* , **2011**, 83,	3.3	21
56	Algebraic fidelity decay for local perturbations. *Physical Review Letters*, **2008**, 100, 124101	7.4	20
55	Statistics of the electromagnetic response of a chaotic reverberation chamber. *Advanced Electromagnetics*, **2015**, 4, 38	1.2	18
54	Probing localization in absorbing systems via Loschmidt echos. *Physical Review Letters*, **2009**, 102, 253901	7.4	17
53	Current and Vorticity Auto Correlation Functions in Open Microwave Billiards. *Progress of Theoretical Physics Supplement*, **2003**, 150, 105-114		17
52	Measurement of the Goos□□chen shift in a microwave cavity. *New Journal of Physics*, **2011**, 13, 023013	2.9	16
51	Optimal wave fields for micromanipulation in complex scattering environments. *Nature Photonics*, **2020**, 14, 149-153	33.9	16
50	Density and correlation functions of vortex and saddle points in open billiard systems. *Physical Review E*, **2009**, 79, 016203	2.4	15
49	On the theory of cavities with point-like perturbations: part I. General theory. *Journal of Physics A: Mathematical and Theoretical*, **2008**, 41, 275101	2	14
48	Optimal Multiplexing of Spatially Encoded Information across Custom-Tailored Configurations of a Metasurface-Tunable Chaotic Cavity. *Physical Review Applied*, **2020**, 13,	4.3	13
47	Fano resonances and decoherence in transport through quantum dots. *Physica E: Low-Dimensional Systems and Nanostructures*, **2005**, 29, 325-333	3	12
46	Microwave transmission spectra in regular and irregular one-dimensional scattering arrangements. *Physica E: Low-Dimensional Systems and Nanostructures*, **2001**, 9, 384-388	3	12

45	Experimental Tuning of Transport Regimes in Hyperuniform Disordered Photonic Materials. *Physical Review Letters*, **2020**, 125, 127402	7.4	12
44	Waveguide photonic limiters based on topologically protected resonant modes. *Physical Review B*, **2017**, 95,	3.3	11
43	Energy landscape in a Penrose tiling. *Physical Review B*, **2016**, 93,	3.3	11
42	Lossy chaotic electromagnetic reverberation chambers: Universal statistical behavior of the vectorial field. *Physical Review E*, **2016**, 93, 032108	2.4	11
41	Fluctuations in an established transmission in the presence of a complex environment. *Physical Review E*, **2017**, 96, 032221	2.4	11
40	Transport gap engineering by contact geometry in graphene nanoribbons: Experimental and theoretical studies on artificial materials. *Physical Review B*, **2017**, 95,	3.3	11
39	Microwave studies of chaotic billiards and disordered systems. *Physica E: Low-Dimensional Systems and Nanostructures*, **2001**, 9, 571-577	3	11
38	Spectra and spectral correlations of microwave graphs with symplectic symmetry. *Physical Review E* , **2018**, 97, 022204	2.4	9
37	In situ realization of particlelike scattering states in a microwave cavity. *Physical Review A*, **2018**, 97,	2.6	9
36	Fidelity decay for local perturbations: microwave evidence for oscillating decay exponents. *Physical Review E*, **2011**, 83, 016214	2.4	9
35	Surface scattering and band gaps in rough waveguides and nanowires. *Physical Review B*, **2012**, 86,	3.3	9
34	Formation and interaction of resonance chains in the open three-disk system. *New Journal of Physics*, **2014**, 16, 033029	2.9	8
33	Investigating dynamical tunnelling in open quantum dots by means of a soft-walled microwave-cavity analogue. *Journal of Physics Condensed Matter*, **2005**, 17, L191-L198	1.8	8
32	Microwave Realization of the Chiral Orthogonal, Unitary, and Symplectic Ensembles. *Physical Review Letters*, **2020**, 124, 116801	7.4	7
31	Observation of supersymmetric pseudo-Landau levels in strained microwave graphene. *Light: Science and Applications*, **2020**, 9, 146	16.7	7
30	Microwave emulations and tight-binding calculations of transport in polyacetylene. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2017**, 381, 24-29	2.3	6
29	Schematic baryon models, their tight binding description and their microwave realization. *New Journal of Physics*, **2013**, 15, 123014	2.9	6
28	Implementing nonuniversal features with a random matrix theory approach: Application to space-to-configuration multiplexing. *Physical Review E*, **2020**, 102, 010201	2.4	6

27	Self-Shielded Topological Receiver Protectors. *Physical Review Applied*, **2020**, 13,	4.3	5
26	Compounding approach for univariate time series with nonstationary variances. *Physical Review E*, **2015**, 92, 062901	2.4	5
25	Transmission in waveguides with compositional and structural disorder: experimental effects of disorder cross-correlations. *New Journal of Physics*, **2012**, 14, 013048	2.9	5
24	Quantum stress in chaotic billiards. *Physical Review E*, **2008**, 77, 066209	2.4	5
23	Experimental Study of Generic Billiards with Microwave Resonators. *Progress of Theoretical Physics Supplement*, **2000**, 139, 283-300		5
22	Microwave Limiters Implemented by Coupled Dielectric Resonators Based on a Topological Defect Mode and CT-Symmetry Breaking. *Acta Physica Polonica A*, **2019**, 136, 790-796	0.6	5
21	Encircling exceptional points as a non-Hermitian extension of rapid adiabatic passage. *Physical Review A*, **2020**, 102,	2.6	5
20	Non-Hermitian CT-Symmetric Spectral Protection of Nonlinear Defect Modes. *Physical Review Letters*, **2020**, 125, 113901	7.4	5
19	Universal intensity statistics in a chaotic reverberation chamber to refine the criterion of statistical field uniformity **2015**,		4
18	Transport studies in three-terminal microwave graphs with orthogonal, unitary, and symplectic symmetry. *Physical Review B*, **2018**, 98,	3.3	4
17	Global and local level dynamics in chaotic microwave billiards. *Annalen Der Physik*, **1999**, 8, 733-741	2.6	4
16	Diffuse field cross-correlation in a programmable-metasurface-stirred reverberation chamber. *Applied Physics Letters*, **2021**, 118, 104101	3.4	3
15	Microwave experiments in the realm of fidelity. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2016**, 374,	3	3
14	Microwave resonator lattices for topological photonics [Invited]. *Optical Materials Express*, **2021**, 11, 629	2.6	3
13	Experimental Realization of Optimal Energy Storage in Resonators Embedded in Scattering Media. *Laser and Photonics Reviews*, **2021**, 15, 2000335	8.3	3
12	Channel cross correlations in transport through complex media. *Physical Review B*, **2016**, 94,	3.3	2
11	Sharp diffraction peaks from chaotic structures. *Chaos*, **1997**, 7, 577-589	3.3	2
10	Non-linear coherent perfect absorption in the proximity of exceptional points. *Communications Physics*, **2022**, 5,	5.4	2

9	Current vortices in aromatic carbon molecules. *Physical Review B*, **2020**, 102,	3.3	2
8	Level dynamics in pseudointegrable billiards: an experimental study. *Physica A: Statistical Mechanics and Its Applications*, **2004**, 344, 523-529	3.3	1
7	Fidelity in Quasi-1D Systems as a Probe for Anderson Localization. *Acta Physica Polonica A*, **2009**, 116, 756-764	0.6	1
6	Diffuse field cross-correlations: Scattering theory and electromagnetic experiments. *Physical Review E*, **2021**, 104, 044204	2.4	1
5	Uncorrelated configurations and field uniformity in reverberation chambers stirred by reconfigurable metasurfaces. *Applied Physics Letters*, **2021**, 118, 144101	3.4	1
4	Localisation and transport in bidimensional random models with separable Hamiltonians. *New Journal of Physics*, **2019**, 21, 073041	2.9	0
3	Microwave graph analogs for the voltage drop in three-terminal devices with orthogonal, unitary, and symplectic symmetry.. *Physical Review E*, **2022**, 105, 014202	2.4	0
2	Spectral duality in graphs and microwave networks. *Physical Review E*, **2021**, 104, 045211	2.4	0
1	Microwave studies of chaotic billiards and disordered systems **2000**, 515-528		