

Stuart Trugman

List of Publications by Year in descending order

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49
papers

1,880
citations

257450

24
h-index

243625

44
g-index

52
all docs

52
docs citations

52
times ranked

2112
citing authors

#	ARTICLE	IF	CITATIONS
1	Holstein polaron. Physical Review B, 1999, 60, 1633-1642.	3.2	235
2	Ultrafast Conductivity Dynamics in Colossal Magnetoresistance Manganites. Physical Review Letters, 2001, 87, 017401.	7.8	142
3	Explanation of normal-state properties of high-temperature superconductors. Physical Review Letters, 1990, 65, 500-503.	7.8	119
4	Dimensionality effects on the Holstein polaron. Physical Review B, 2002, 65, .	3.2	117
5	Origin of the decrease in the torsional-oscillator period of solid ^4He . Physical Review B, 2007, 76, .	3.2	90
6	Ultrafast carrier dynamics and radiative recombination in multiferroic BiFeO ₃ . Applied Physics Letters, 2012, 100, .	3.3	77
7	Tracking Ultrafast Photocurrents in the Weyl Semimetal TaAs Using THz Emission Spectroscopy. Physical Review Letters, 2019, 122, 197401.	7.8	76
8	Quasiparticle Relaxation Dynamics in Heavy Fermion Compounds. Physical Review Letters, 2003, 91, 027401.	7.8	67
9	Long-wavelength magnetic and magnetoelectric excitations in the ferroelectric antiferromagnet BiFeO ₃ . Physical Review B, 2011, 83, .	3.2	66
10	Ultrafast carrier dynamics in the large-magnetoresistance material WTe ₂ . Physical Review B, 2015, 92, .	3.2	58
11	High-dimensional fractionalization and spinon deconfinement in pyrochlore antiferromagnets. Physical Review B, 2007, 75, .	3.2	56
12	Ultrafast Electron and Hole Dynamics in Germanium Nanowires. Nano Letters, 2008, 8, 1619-1624.	9.1	55
13	Entropy of solid ^4He : The possible role of a dislocation-induced glass. Physical Review B, 2007, 75, .	3.2	54
14	Quantum dynamics of polaron formation. Physical Review B, 2007, 75, .	3.2	44
15	Exact Ground States of a Frustrated 2D Magnet: Deconfined Fractional Excitations at a First-Order Quantum Phase Transition. Physical Review Letters, 2004, 93, 217202.	7.8	41
16	Heavy holes as a precursor to superconductivity in antiferromagnetic CeIn ₃ . Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 7741-7744.	7.1	40
17	Coherent optical and acoustic phonon generation correlated with the charge-ordering phase transition in La _{1-x} CaxMnO ₃ . Physical Review B, 2005, 71, .	3.2	38
18	Ultrafast quasiparticle relaxation dynamics in normal metals and heavy-fermion materials. Physical Review B, 2004, 69, .	3.2	37

#	ARTICLE	IF	CITATIONS
19	On Photo-Induced Phenomena in Complex Materials: Probing Quasiparticle Dynamics using Infrared and Far-Infrared Pulses. Journal of the Physical Society of Japan, 2006, 75, 011006.	1.6	36
20	Magnetic Exchange Interaction between Rare-Earth and Mn Ions in Multiferroic Hexagonal Manganites. Physical Review Letters, 2008, 101, 247601.	7.8	36
21	Measurement of Two Low-Temperature Energy Gaps in the Electronic Structure of Antiferromagnetic URu_2Si_2 Using Evidence of a hidden-order pseudogap state in URu_2Si_2 . Physical Review Letters, 2010, 105, 057402.	7.8	34
22	Measurement of Two Low-Temperature Energy Gaps in the Electronic Structure of Antiferromagnetic URu_2Si_2 Using Evidence of a hidden-order pseudogap state in URu_2Si_2 . Physical Review Letters, 2010, 105, 057402.	3.2	32
23	Using ultrashort optical pulses to couple ferroelectric and ferromagnetic order in an oxide heterostructure. Nature Communications, 2014, 5, 5832.	12.8	30
24	Detection of Coherent Magnons via Ultrafast Pump-Probe Reflectance Spectroscopy in Multiferroic $Ba_0.6Sr_{0.4}TiO_3$. Physical Review Letters, 2008, 101, 097603.	7.8	29
25	Coexistence of coupled magnetic phases in epitaxial $TbMnO_3$ films revealed by ultrafast optical spectroscopy. Applied Physics Letters, 2012, 101, .	3.3	24
26	Hybridization and Superconducting Gaps in the Heavy-Fermion Superconductor $PuCoGa_5$ Probed via the Dynamics of Photoinduced Quasiparticles. Physical Review Letters, 2010, 104, 227002.	7.8	23
27	Numerical Solution of the Holstein Polaron Problem. Springer Series in Materials Science, 2007, , 393-461.	0.6	22
28	Photocurrent-driven transient symmetry breaking in the Weyl semimetal TaAs. Nature Materials, 2022, 21, 62-66.	27.5	20
29	Spectral function of the Holstein polaron at finite temperature. Physical Review B, 2019, 100, .	3.2	19
30	Dynamic properties of a polaron coupled to dispersive optical phonons. Physical Review B, 2021, 103, .	3.2	19
31	Ageing and immortality in a cell proliferation model. Journal of Theoretical Biology, 2007, 248, 411-417.	1.7	17
32	Photoinduced stabilization and enhancement of the ferroelectric polarization in $Ba_{0.1}Sr_{0.9}TiO_3$. Physical Review Letters, 2010, 105, 057402.	3.2	17
33	Spin-dependent polaron formation dynamics in $Eu_{0.75}MnO_3$ by femtosecond pump-probe spectroscopy. Physical Review B, 2015, 91, .	3.2	17
34	Probing ultrafast spin dynamics through a magnon resonance in the antiferromagnetic multiferroic $HoMnO_3$. Physical Review B, 2016, 94, .	3.2	16
35	Probing the Interplay between Quantum Charge Fluctuations and Magnetic Ordering in $LuFe_2O_4$. Scientific Reports, 2013, 3, 2654.	3.3	15
36	Modal analysis method to describe weak nonlinear effects in metamaterials. Physical Review B, 2012, 85, .	3.2	13

#	ARTICLE	IF	CITATIONS
37	Coupled Charge-Spin Dynamics of the Magnetoresistive Pyrochlore $Tl_2Mn_2O_7$ Probed Using Ultrafast Midinfrared Spectroscopy. <i>Physical Review Letters</i> , 2005, 95, 267404.	7.8	12
38	Torsional oscillators and the entropy dilemma of putative supersolid ^4He . <i>Journal of Physics: Conference Series</i> , 2009, 150, 032025.	0.4	10
39	Directly probing spin dynamics in insulating antiferromagnets using ultrashort terahertz pulses. <i>Physical Review B</i> , 2016, 94, .	3.2	8
40	Using ultrashort terahertz pulses to directly probe spin dynamics in insulating antiferromagnets. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 194003.	2.8	8
41	Optical absorption spectroscopy in hybrid systems of plasmons and excitons. <i>Nanoscale</i> , 2019, 11, 2037-2047.	5.6	3
42	Ultrafast carrier dynamics in semiconductor nanowires. <i>Proceedings of SPIE</i> , 2009, , .	0.8	2
43	Induced polarization at a paraelectric/superconducting interface. <i>Physical Review B</i> , 2011, 84, .	3.2	2
44	Ultrafast carrier dynamics and radiative recombination in multiferroic BiFeO_3 single crystals and thin films. <i>EPJ Web of Conferences</i> , 2013, 41, 03018.	0.3	2
45	The influence of charge and magnetic order on polaron and acoustic phonon dynamics in LuFe_2O_4 . <i>Applied Physics Letters</i> , 2015, 107, .	3.3	2
46	Dynamic investigations of multiferroics: Terahertz and beyond. <i>Journal of Physics: Conference Series</i> , 2009, 148, 012037.	0.4	0
47	Ultrafast Dynamics of Multiferroic $h\text{-LuFeO}_3$. , 2015, , .		0
48	Coupling between antiferromagnetic and superconducting order in an oxide heterostructure revealed using ultrafast optical spectroscopy. , 2013, , .		0
49	Polarization-dependent surface-bulk scattering in the Weyl semimetal NbAs . , 2017, , .		0