Alan D Bristow

List of Publications by Year
in descending order

102 papers	6,028 citations	147726 31 h-index	69214 77 g-index
104 all docs	104 docs citations	104 times ranked	8084 citing authors

#	Article	IF	Citations
1	Photocatalytic Activity Enhanced by Plasmonic Resonant Energy Transfer from Metal to Semiconductor. Journal of the American Chemical Society, 2012, 134, 15033-15041.	6.6	1,052
2	Plasmon-induced resonance energy transfer for solar energy conversion. Nature Photonics, 2015, 9, 601-607.	15.6	587
3	Two-photon absorption and Kerr coefficients of silicon for 850â€“2200nm. Applied Physics Letters, 2007, 90, 191104.	1.5	537
4	Solar Hydrogen Generation by a CdS-Au-TiO₂ Sandwich Nanorod Array Enhanced with Au Nanoparticle as Electron Relay and Plasmonic Photosensitizer. Journal of the American Chemical Society, 2014, 136, 8438-8449.	6.6	533
5	Ag@Cu₂O Core-Shell Nanoparticles as Visible-Light Plasmonic Photocatalysts. ACS Catalysis, 2013, 3, 47-51.	5.5	471
6	Photocatalytic Water Oxidation by Hematite/Reduced Graphene Oxide Composites. ACS Catalysis, 2013, 3, 746-751.	5.5	226
7	Controlling Plasmon-Induced Resonance Energy Transfer and Hot Electron Injection Processes in Metal@TiO₂ Coreâ€“Shell Nanoparticles. Journal of Physical Chemistry C, 2015, 119, 16239-16244.	1.5	219
8	Effects of Defects on Photocatalytic Activity of Hydrogen-Treated Titanium Oxide Nanobelts. ACS Catalysis, 2017, 7, 1742-1748.	5.5	173
9	A versatile ultrastable platform for optical multidimensional Fourier-transform spectroscopy. Review of Scientific Instruments, 2009, 80, 073108.	0.6	162
10	Resonance lineshapes in two-dimensionalâ€Fourier transform spectroscopy. Optics Express, 2010, 18, 17699.	1.7	128
11	Enhanced second-harmonic generation in AlGaAs microring resonators. Optics Letters, 2007, 32, 826.	1.7	116
12	Two-Quantum Many-Body Coherences in Two-Dimensional Fourier-Transform Spectra of Exciton Resonances in Semiconductor Quantum Wells. Physical Review Letters, 2010, 104, 117401.	2.9	115
13	Ultrafast carrier dynamics in thin-films of the topological insulator Bi2Se3. Applied Physics Letters, 2013, 103, .	1.5	99
14	Two-Dimensional Double-Quantum Spectra Reveal Collective Resonances in an Atomic Vapor. Physical Review Letters, 2012, 108, 193201.	2.9	97
15	Nonlinear absorption in Au films: Role of thermal effects. Physical Review B, 2007, 75, .	1.1	90
16	Unraveling quantum pathways using optical 3D Fourier-transform spectroscopy. Nature Communications, 2013, 4, 1390.	5.8	88
17	Ultrafast nonlinear response of AlGaAs two-dimensional photonic crystal waveguides. Applied Physics Letters, 2003, 83, 851-853.	1.5	76
18	All-optical retrieval of the global phase for two-dimensional Fourier-transform spectroscopy. Optics Express, 2008, 16, 18017.	1.7	73

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19	All-optical injection of ballistic electrical currents in unbiased silicon. Nature Physics, 2007, 3, 632-635.	6.5	72
20	Optical Two-Dimensional Fourier Transform Spectroscopy of Semiconductor Quantum Wells. Accounts of Chemical Research, 2009, 42, 1423-1432.	7.6	66
21	Polarization dependence of semiconductor exciton and biexciton contributions to phase-resolved optical two-dimensional Fourier-transform spectra. Physical Review B, 2009, 79, .	1.1	64
22	Theoretical maximum efficiency of solar energy conversion in plasmonic metalâ€“semiconductor heterojunctions. Physical Chemistry Chemical Physics, 2015, 17, 30013-30022.	1.3	58
23	Exciton-exciton and exciton-phonon interactions in an interfacial GaAs quantum dot ensemble. Physical Review B, 2011, 83, .	1.1	55
24	Isolating excitonic Raman coherence in semiconductors using two-dimensional correlation spectroscopy. Journal of Chemical Physics, 2008, 129, 234711.	1.2	53
25	Two-dimensional Fourier-transform spectroscopy of potassium vapor. Physical Review A, 2010, 82, .	1.0	47
26	Optical 2-D Fourier Transform Spectroscopy of Excitons in Semiconductor Nanostructures. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 318-328.	1.9	40
27	Polarization conversion in the reflectivity properties of photonic crystal waveguides. IEEE Journal of Quantum Electronics, 2002, 38, 880-884.	1.0	38
28	Preparation, characterization, and electrical properties of epitaxial NbO₂thin film lateral devices. Journal Physics D: Applied Physics, 2015, 48, 335308.	1.3	38
29	Enhanced hot electron lifetimes in quantum wells with inhibited phonon coupling. Scientific Reports, 2018, 8, 12473.	1.6	37
30	Separating Homogeneous and Inhomogeneous Line Widths of Heavy- and Light-Hole Excitons in Weakly Disordered Semiconductor Quantum Wells. Journal of Physical Chemistry B, 2011, 115, 5365-5371.	1.2	36
31	Exciton relaxation and coupling dynamics in a GaAs/Al<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>Ga<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>As quantum well. Physical Review B, 2003, 68, .	1.1	34
32	Terahertz generation by optical rectification in chalcopyrite crystals ZnGeP₂, CdGeP₂ and CdSiP₂. Optics Express, 2019, 27, 16958.	1.7	34
33	Defect states and commensurability in dual-periodAlxGa1â^'xAsphotonic crystal waveguides. Physical Review B, 2003, 68, .	1.1	31
34	Broadband terahertz pulse emission from ZnGeP_2. Optics Letters, 2012, 37, 788.	1.7	31
35	Linear and nonlinear optical properties of Au-polymer metallodielectric Bragg stacks. Journal of the Optical Society of America B: Optical Physics, 2006, 23, 2142.	0.9	28
36	Coherent control of injection currents in high-quality films of Bi2Se3. Applied Physics Letters, 2015, 106, .	1.5	26

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37	Inverting Transient Absorption Data to Determine Transfer Rates in Quantum Dotâ€“TiO₂ Heterostructures. Journal of Physical Chemistry C, 2015, 119, 6337-6343.	1.5	24
38	Multidimensional coherent spectroscopy of a semiconductor microcavity. Physical Review B, 2015, 91, .	1.1	23
39	Second harmonic generation from tetragonal centrosymmetric crystals. Physical Review B, 2009, 80, .	1.1	22
40	Terahertz generation by optical rectification in uniaxial birefringent crystals. Optics Express, 2012, 20, 16968.	1.7	21
41	Identification of photocurrents in topological insulators. Optics Express, 2016, 24, 23583.	1.7	21
42	Persistent spin helix manipulation by optical doping of a CdTe quantum well. Physical Review B, 2018, 97, .	1.1	20
43	Role of strain on the coherent properties of GaAs excitons and biexcitons. Physical Review B, 2016, 94, .	1.1	18
44	Field control of anisotropic spin transport and spin helix dynamics in a modulation-doped GaAs quantum well. Physical Review B, 2018, 97, .	1.1	17
45	Terahertz emission from ZnGeP_2: phase-matching, intensity, and length scalability. Journal of the Optical Society of America B: Optical Physics, 2013, 30, 2882.	0.9	16
46	Investigation of band gap narrowing in nitrogen-doped La₂Ti₂O₇ with transient absorption spectroscopy. Physical Chemistry Chemical Physics, 2015, 17, 31039-31043.	1.3	15
47	Boosting Photocatalytic Hydrogen Production by Modulating Recombination Modes and Proton Adsorption Energy. Journal of Physical Chemistry Letters, 2019, 10, 5381-5386.	2.1	15
48	Surface Recombination in Ultra-Fast Carrier Dynamics of Perovskite Oxide La0.7Sr0.3MnO3 Thin Films. ACS Nano, 2019, 13, 3457-3465.	7.3	15
49	Photoluminescence spectroscopy of YVO4:Eu3+ nanoparticles with aromatic linker molecules: A precursor to biomedical functionalization. Journal of Applied Physics, 2014, 115, 163107.	1.1	13
50	Ultrafast nonlinear tuning of the reflection properties of AlGaAs photonic crystal waveguides by two-photon absorption. Journal of Applied Physics, 2004, 96, 4729-4734.	1.1	12
51	Transport of a persistent spin helix drifting transverse to the spin texture. Physical Review B, 2019, 99, .	1.1	11
52	Structureâ€“Propertyâ€“Performance Relationships of Cuprous Oxide Nanostructures for Dielectric Mie Resonance-Enhanced Photocatalysis. ACS Catalysis, 2022, 12, 7975-7985.	5.5	11
53	Enhanced all-optical tuning of leaky eigenmodes in photonic crystal waveguides. Optics Letters, 2006, 31, 2284.	1.7	10
54	Hot-carrier dynamics in InAs/AlAsSb multiple-quantum wells. Scientific Reports, 2021, 11, 10483.	1.6	10

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55	Dynamical formation and active control of persistent spin helices in III-V and II-VI quantum wells. Semiconductor Science and Technology, 2019, 34, 093002.	1.0	9
56	Coherent coupling between exciton resonances governed by the disorder potential. Physical Review B, 2013, 88, .	1.1	8
57	Optical absorption and disorder in delafossites. Applied Physics Letters, 2017, 111, 012102.	1.5	8
58	Sum and difference frequency generation as diagnostics for leaky eigenmodes in two-dimensional photonic crystal waveguides. Journal of Applied Physics, 2006, 99, 023105.	1.1	6
59	Carrier transport and electronâ€“lattice interactions of nonlinear optical crystals CdGeP₂, ZnGeP₂, and CdSiP₂. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 769.	0.9	6
60	Automated polarization-dependent multidimensional coherent spectroscopy phased using transient absorption. Optics Express, 2019, 27, 31790.	1.7	6
61	Switchable AlxGa1â^'xAs all-optical delay line at 1.55Î¼m. Applied Physics Letters, 2007, 90, 101112.	1.5	5
62	Signatures of four-particle correlations associated with exciton-carrier interactions in coherent spectroscopy on bulk GaAs. Physical Review B, 2016, 94, .	1.1	5
63	Coupled exciton-trion spin dynamics in a MoSe ₂ monolayer. 2D Materials, 2018, 5, 045024.	2.0	5
64	Spin-locked transport in a two-dimensional electron gas. Physical Review B, 2020, 101, .	1.1	5
65	Giant Third-Harmonic Optical Generation from Topological Insulator Heterostructures. Nano Letters, 2021, 21, 8872-8879.	4.5	5
66	Introductory Chapter: Overview of the Properties and Applications of Noble and Precious Metals. , 0, , .		4
67	Stimulated two-photon emission in bulk CdSe. Optics Letters, 2018, 43, 5066.	1.7	4
68	Coherent contributions to population dynamics in a semiconductor microcavity. Physical Review B, 2022, 105, .	1.1	4
69	Identification of a Fe-Dependent Optical Mode in CuAl_{1â€“x}Fe_xO₂. Journal of Physical Chemistry C, 2021, 125, 3577-3583.	1.5	3
70	Application of wavelet analysis on transient reflectivity in ultra-thin films. Optics Express, 2019, 27, 14684.	1.7	3
71	Fast phase cycling in non-collinear optical two-dimensional coherent spectroscopy. Optics Letters, 2020, 45, 5852.	1.7	3
72	Spectral broadening and population relaxation in a GaAs interfacial quantum dot ensemble and quantum well nanostructure. Physica Status Solidi (B): Basic Research, 2011, 248, 829-832.	0.7	2

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73	Optical three-dimensional coherent spectroscopy. Proceedings of SPIE, 2014, , .	0.8	2
74	Above and below band edge light recovery with plasmonics. Proceedings of SPIE, 2015, , .	0.8	2
75	Analysis of complex multidimensional optical spectra by linear prediction. Optics Express, 2021, 29, 37525.	1.7	2
76	Hot-carrier dynamics and transport in IIIâ€“V heterostructures for photovoltaic applications. Journal of Photonics for Energy, 2022, 12, .	0.8	2
77	All-optical injection of ballistic electrical currents in unbiased silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 340-342.	0.8	1
78	Revealing exciton dephasing and transport dynamics in semiconductor quantum well - quantum dot systems using optical 2D Fourier transform spectroscopy. , 2012, , .		1
79	Optical Multidimensional Spectroscopy of Atomic Vapor. EPJ Web of Conferences, 2013, 41, 02010.	0.1	1
80	Hot-carrier dynamics of type-II InAs/AlAs1-xSbx quantum wells. , 2020, , .		1
81	Nonequilibrium Hot-Carrier Transport in Type-II Multiple Quantum Wells for Solar-Cell Applications. Physical Review Applied, 2022, 18, .	1.5	1
82	Reflection and emission of Brillouin zone edge states for active photonic crystal waveguides. Journal of Optics, 2005, 7, S270-S275.	1.5	0
83	Switchable All-Optical 188-ps Delay Line in AlGaAs. , 2007, , .		0
84	Coherent optical processes of semiconductors studied via two-dimensional Fourier transform spectroscopy. , 2008, , .		0
85	Advances in optical two-dimensional spectroscopy applied to the study of semiconductor and atomic systems. Proceedings of SPIE, 2010, , .	0.8	0
86	Multidimensional coherent spectroscopy of a semiconductor microcavity. , 2016, , .		0
87	Two-dimensional coherent spectroscopy of excitons, biexcitons and exciton-polaritons. , 2016, , .		0
88	Control of hot carrier thermalization in type-II quantum wells: a route to practical hot carrier solar cells. , 2018, , .		0
89	Resonance lineshapes in two-dimensional Fourier transform spectroscopy. , 2010, , .		0
90	Many-body two-quantum coherences in 2D Fourier-Transform spectra of semiconductors. , 2010, , .		0

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91	Coherent Linewidths of Interfacial GaAs Quantum Dot Excitons and Incoherent Coupling from Quantum Well Excitons. , 2010, , .		0
92	Linewidth and Coupling of Interfacial GaAs Quantum Dots Measured with Optical Two-Dimensional Fourier Transform Spectroscopy. , 2010, , .		0
93	Two-Dimensional Coherent Spectroscopy of Strained GaAs. , 2016, , .		0
94	Hot-carrier cooling dynamics of type-II InAs/AlA1-xSbx quantum wells. , 2019, , .		0
95	Phase-resolved multi-dimensional coherent spectroscopy with automated polarization control. , 2019, , .		0
96	Ultra-Fast Phenomena in Perovskite Oxide La0.7Sr0.3MnO3 Thin Films. , 2019, , .		0
97	Terahertz generation by optical rectification in chalcopyrite crystals ZnGeP2, CdGeP2 and CdSiP2. , 2019, , .		0
98	Ultrafast Carrier Dynamics and Photoconductivity of the Chalcopyrite Crystals. , 2020, , .		0
99	Mixing-time evolution of coherent exciton-polariton response due to many-body interactions. , 2020, , .		0
100	Non-equilibrium carrier transport and dynamics of type-II quantum wells. , 2021, , .		0
101	Coherent and incoherent contribution of population dynamics of semiconductor exciton-polaritons. , 2021, , .		0
102	Excitation Dynamics and Dielectric Resonance Energy Transfer in Cu2O Nanocubes. , 2021, , .		0