Jason R Bochinski

List of Publications by Year
in descending order

36 papers	1,299 citations	331670 21 h-index	345221 36 g-index
36 all docs	36 docs citations	36 times ranked	1336 citing authors

#	Article	IF	Citations
1	Phase Space Manipulation of Cold Free Radical OH Molecules. Physical Review Letters, 2003, 91, 243001.	7.8	143
2	Edge electrospinning for high throughput production of quality nanofibers. Nanotechnology, 2011, 22, 345301.	2.6	123
3	Unconfined fluid electrospun into high quality nanofibers from a plate edge. Polymer, 2010, 51, 4928-4936.	3.8	117
4	Production of cold formaldehyde molecules for study and control of chemical reaction dynamics with hydroxyl radicals. Physical Review A, 2006, 73, .	2.5	106
5	Embedded metal nanoparticles as localized heat sources: An alternative processing approach for complex polymeric materials. Polymer, 2011, 52, 1674-1685.	3.8	74
6	Metal Nanoparticles Acting as Lightâ€Activated Heating Elements within Composite Materials. Advanced Functional Materials, 2012, 22, 5259-5270.	14.9	63
7	Cold free-radical molecules in the laboratory frame. Physical Review A, 2004, 70, .	2.5	55
8	Driving the driven atom: Spectral signatures. Physical Review A, 1997, 56, R4381-R4384.	2.5	49
9	Thermal Annealing of Polymer Nanocomposites via Photothermal Heating: Effects on Crystallinity and Spherulite Morphology. Macromolecules, 2013, 46, 8596-8607.	4.8	43
10	Effect of Solution Parameters on Spontaneous Jet Formation and Throughput in Edge Electrospinning from a Fluid-Filled Bowl. Macromolecules, 2012, 45, 6527-6537.	4.8	42
11	Efficient Stark deceleration of cold polar molecules. European Physical Journal D, 2004, 31, 351-358.	1.3	39
12	Anisotropic Thermal Processing of Polymer Nanocomposites via the Photothermal Effect of Gold Nanorods. Particle and Particle Systems Characterization, 2013, 30, 193-202.	2.3	34
13	Spatial temperature mapping within polymer nanocomposites undergoing ultrafast photothermal heating via gold nanorods. Nanoscale, 2014, 6, 15236-15247.	5.6	33
14	Power-dependent loss from an ytterbium magneto-optic trap. Physical Review A, 2000, 61, .	2.5	32
15	Nanoscale steady-state temperature gradients within polymer nanocomposites undergoing continuous-wave photothermal heating from gold nanorods. Nanoscale, 2017, 9, 11605-11618.	5.6	27
16	Simultaneous multi-isotope trapping of ytterbium. Physical Review A, 2001, 63, .	2.5	26
17	Magnetic trapping of ytterbium and the alkaline-earth metals. Physical Review A, 2002, 66, .	2.5	25
18	Enhanced Crystallinity of Polymer Nanofibers without Loss of Nanofibrous Morphology via Heterogeneous Photothermal Annealing. Macromolecules, 2016, 49, 9484-9492.	4.8	24

#	Article	IF	Citations
19	A pulsed, low-temperature beam of supersonically cooled free radical OH molecules. Chemical Physics Letters, 2004, 395, 53-57.	2.6	23
20	<i>In situ</i>curing of liquid epoxy via gold-nanoparticle mediated photothermal heating. Nanotechnology, 2017, 28, 065601.	2.6	22
21	Intrinsically Irreversible Multiphoton Laser Gain Mechanisms. Physical Review Letters, 1997, 78, 1432-1435.	7.8	22
22	Experimental study of photon-echo size in optically thick media. Physical Review A, 1999, 60, R757-R760.	2.5	21
23	Dynamics within Alkylsiloxane Self-Assembled Monolayers Studied by Sensitive Dielectric Spectroscopy. ACS Nano, 2008, 2, 2392-2400.	14.6	20
24	Maximizing Spontaneous Jet Density and Nanofiber Quality in Unconfined Electrospinning: The Role of Interjet Interactions. Macromolecules, 2013, 46, 7352-7362.	4.8	20
25	Optical double-resonance cooled-atom spectroscopy. Physical Review A, 2001, 63, .	2.5	18
26	Unconfined, melt edge electrospinning from multiple, spontaneous, self-organized polymer jets. Materials Research Express, 2014, 1, 045304.	1.6	15
27	Control of the electric fieldâ€"polymer solution interaction by utilizing ultra-conductive fluids. Polymer, 2014, 55, 6390-6398.	3.8	15
28	Probing magneto-optic trap dynamics through weak excitation of a coupled narrow-linewidth transition. Physical Review A, 2000, 61, .	2.5	14
29	Blending with Nonâ€responsive Polymers to Incorporate Nanoparticles into Shapeâ€Memory Materials and Enable Photothermal Heating: The Effects of Heterogeneous Temperature Distribution. Macromolecular Chemistry and Physics, 2014, 215, 2345-2356.	2.2	13
30	Vacuum-mediated multiphoton transitions. Physical Review A, 2001, 63, .	2.5	11
31	Photothermally-driven thermo-oxidative degradation of low density polyethylene: heterogeneous heating plus a complex reaction leads to homogeneous chemistry. Nanotechnology, 2019, 30, 475706.	2.6	11
32	Nanoparticle-based photothermal heating to drive chemical reactions within a solid: using inhomogeneous polymer degradation to manipulate mechanical properties and segregate carbonaceous by-products. Nanoscale, 2020, 12, 904-923.	5.6	6
33	Laser modulation technique for single isotope spectroscopic studies. Physical Review A, 2000, 61, .	2.5	4
34	Facile measurement of surface heat loss from polymer thin films via fluorescence thermometry. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 643-652.	2.1	4
35	Increasing ionic conductivity within thermoplastics via commercial additives results in a dramatic decrease in fiber diameter from melt electrospinning. Soft Matter, 2021, 17, 9264-9279.	2.7	3
36	Tracking the complete degradation lifecycle of poly(ethyl cyanoacrylate): From induced photoluminescence to nitrogen-doped nano-graphene precursor residue. Polymer Degradation and Stability, 2022, 195, 109772.	5.8	2