Carl E Bonner

List of Publications by Year
in descending order

68 papers	1,528 citations	331259 21 h-index	301761 39 g-index
68 all docs	68 docs citations	68 times ranked	1726 citing authors

#	Article	IF	Citations
1	Controlling spontaneous emission with metamaterials. Optics Letters, 2010, 35, 1863.	1.7	333
2	Control of spontaneous emission in a volume of functionalized hyperbolic metamaterial. Applied Physics Letters, 2011, 99, .	1.5	144
3	Photovoltaic enhancement of organic solar cells by a bridged donor-acceptor block copolymer approach. Applied Physics Letters, 2007, 90, 043117.	1.5	97
4	Design, Synthesis, and Characterization of a â^'Donorâ^'Bridgeâ^'Acceptorâ^'Bridge- Type Block Copolymer via Alkoxy- and Sulfone- Derivatized Poly(phenylenevinylenes). Macromolecules, 2006, 39, 4317-4326.	2.2	77
5	Control of FÃ¶rster energy transfer in the vicinity of metallic surfaces and hyperbolic metamaterials. Faraday Discussions, 2015, 178, 395-412.	1.6	69
6	Effects of Zn to Te ratio on the molecularâ€beam epitaxial growth of ZnTe on GaAs. Journal of Applied Physics, 1988, 64, 1191-1195.	1.1	65
7	Enhancing Eu^3+ magnetic dipole emission by resonant plasmonic nanostructures. Optics Letters, 2015, 40, 1659.	1.7	61
8	Effective third-order nonlinearities in metallic refractory titanium nitride thin films. Optical Materials Express, 2015, 5, 2395.	1.6	50
9	Intrinsic and extrinsic photoluminescence spectra of ZnTe films on GaAs deposited by molecularâ€beam and organoâ€metallic vaporâ€phase epitaxy. Journal of Applied Physics, 1988, 64, 3210-3214.	1.1	47
10	Radiative recombination mechanisms in staggered-alignment (GaAs)/(AlAs) heterostructures. Physical Review B, 1989, 40, 1825-1835.	1.1	45
11	Optical Absorption of Poly(thienylene vinylene)-Conjugated Polymers: Experiment and First Principle Theory. Journal of Physical Chemistry C, 2008, 112, 7908-7912.	1.5	33
12	Stability of phosphonic self assembled monolayers (SAMs) on cobalt chromium (Coâ€“Cr) alloy under oxidative conditions. Applied Surface Science, 2011, 257, 5605-5612.	3.1	33
13	Stimulated Emission of Surface Plasmons on Top of Metamaterials with Hyperbolic Dispersion. ACS Photonics, 2015, 2, 1019-1024.	3.2	32
14	Recombination mechanisms in type II (GaAs/AlAs) heterostructures. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1988, 6, 1156.	1.6	30
15	Design, Synthesis, Characterization, and Modeling of a Series ofS,S-Dioxothienylenevinylene-Based Conjugated Polymers with Evolving Frontier Orbitals. Macromolecules, 2009, 42, 663-670.	2.2	29
16	Ultrafast investigation of electron dynamics in multi-layer metals. International Journal of Heat and Mass Transfer, 2004, 47, 2261-2268.	2.5	26
17	Crystal growth, spectroscopic characterization, and laser performance of a new efficient laser material Nd:Ba5(PO4)3F. Applied Physics Letters, 1997, 71, 303-305.	1.5	25
18	Conjugated Block Copolymers for Opto-Electronic Functions. Synthetic Metals, 2003, 137, 883-884.	2.1	25

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19	Gyroidal titanium nitride as nonmetallic metamaterial. Optical Materials Express, 2015, 5, 1316.	1.6	25
20	Influence of doping rate in Er^3+:ZnO films on emission characteristics. Optics Letters, 2008, 33, 815.	1.7	24
21	In vitro stability study of organophosphonic self assembled monolayers (SAMs) on cobalt chromium (Coâ€“Cr) alloy. Materials Science and Engineering C, 2013, 33, 2050-2058.	3.8	22
22	Photoluminescence studies of heteroepitaxial gaas on si. Journal of Electronic Materials, 1988, 17, 115-119.	1.0	21
23	Enhancement of Electrochromic Polymer Switching in Plasmonic Nanostructured Environment. ACS Applied Nano Materials, 2019, 2, 1713-1719.	2.4	20
24	Nanolayers on Magnesium (Mg) Alloy for Metallic Bone Tissue Engineering Scaffolds. Journal of Biomaterials and Tissue Engineering, 2013, 3, 196-204.	0.0	17
25	Formation of Nanosized Phosphonic Acid Self Assembled Monolayers on Cobalt-Chromium Alloy for Potential Biomedical Applications. Journal of Biomedical Nanotechnology, 2010, 6, 117-128.	0.5	16
26	Long-range wetting transparency on top of layered metal-dielectric substrates. Scientific Reports, 2016, 6, 27834.	1.6	13
27	Novel photovoltaic Î´â€doped GaAs superlattice structure. Applied Physics Letters, 1989, 54, 2247-2249.	1.5	11
28	Raman spectroscopic study of barium fluorapatite. Journal of Luminescence, 1999, 81, 101-109.	1.5	11
29	A spectroscopic and Juddâ€“Ofelt analysis of the relaxation dynamics of Tm3+ in the fluorapatites, FAP, S-FAP, and B-FAP. Optical Materials, 2002, 20, 1-12.	1.7	11
30	Volume effects on the Raman frequencies of phosphate ions in fluorapatite crystals. Optical Materials, 2004, 26, 17-22.	1.7	11
31	Effect of nonlocal metalâ€“dielectric environments on concentration quenching of HITC dye. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 3579.	0.9	11
32	Low-Temperature Photoluminescence of Mocvd GaAs Grown Directly on Si. Materials Research Society Symposia Proceedings, 1987, 91, 255.	0.1	10
33	Morphological effects to carrier mobility in a RO-PPV/SF-PPV donor/acceptor binary thin film opto-electronic device. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 116, 279-282.	1.7	10
34	Ultra-lightweight space power from hybrid thin-film solar cells. IEEE Aerospace and Electronic Systems Magazine, 2008, 23, 31-41.	2.3	10
35	Control of Physical and Chemical Processes with Nonlocal Metalâ€“Dielectric Environments. ACS Photonics, 2019, 6, 3039-3056.	3.2	10
36	Nonlinear phase mismatch and optimal input combination in atomic four-wave mixing in Bose-Einstein condensates. Physical Review A, 2003, 67, .	1.0	9

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37	Optimizing Organic Solar Cells in Both Space and Energy Domains. Synthetic Metals, 2005, 154, 65-68.	2.1	7
38	Energy levels and optical properties of neodymium-doped barium fluorapatite. Journal of Applied Physics, 2000, 88, 1935-1942.	1.1	6
39	Effect of Random Nanostructured Metallic Environments on Spontaneous Emission of HITC Dye. Nanomaterials, 2020, 10, 2135.	1.9	6
40	Ethanol adsorption on the Si (111) surface: First principles study. Journal of Chemical Physics, 2012, 136, 114703.	1.2	5
41	Fumaryl chloride and maleic anhydride-derived crosslinked functional polymers for nonlinear optical waveguide applications. Journal of Applied Polymer Science, 2004, 92, 317-322.	1.3	4
42	Temperature dependence on the cross-relaxation rates in Tm3+ doped strontium fluorapatite. Journal of Luminescence, 2004, 109, 129-133.	1.5	2
43	Role of photoinduced heating in transient photoconductivity in CMR materials. Physica B: Condensed Matter, 2005, 363, 76-81.	1.3	2
44	Surface Modification of Cobalt Chromium Alloy via Phosphonic Acid Organic Nanosized Thin Films. ECS Transactions, 2010, 33, 91-95.	0.3	2
45	Effective third-order nonlinearities in metallic refractory titanium nitride thin films: publisherâ€™s note. Optical Materials Express, 2015, 5, 2587.	1.6	2
46	Self-Assembly and Charge Transport of a Conjugated Polymer on ITO Substrates. Polymer Science, 2017, 03, .	0.2	2
47	Femtosecond damage threshold of multilayer metal films. , 2003, , .		1
48	Block copolymers for opto-electronics. , 2004, 5280, 253.		1
49	Silver nanowires: synthesis, characterization and optical properties. Materials Research Society Symposia Proceedings, 2008, 1144, 1.	0.1	1
50	In-Vitro Corrosion Inhibition of Magnesium Alloy via Organic Nanocoatings. ECS Transactions, 2011, 33, 97-101.	0.3	1
51	Biomaterial Patterning by Microcontact Printing via Deposition of Self Assembled Monolayers (SAMs) on Cobalt Chromium (Coâ€“Cr) Alloy. Journal of Advanced Microscopy Research, 2015, 10, 244-253.	0.3	1
52	A Fluid Metamaterial With Tunable Anisotropy. , 2011, , .		1
53	Effective Third-Order Nonlinearities in Refractory Plasmonic TiN Thin Films. , 2016, , .		1
54	Photoluminescence of MBE and MOCVD ZnTe Films on GaAs. Materials Research Society Symposia Proceedings, 1987, 102, 327.	0.1	0

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55	Fumaryl Chloride and Maleic Anhydride Derived Crosslinked Functional Polymers and Nano Structures. , 2002, , 17-30.		0
56	Polymer materials for electro-optic and optoelectronic applications: maximizing device performances by creating desirable intermolecular electrostatic interactions. , 2005, , .		0
57	Optimizing organic optoelectronic materials in both space and energy/time domains. , 2005, , .		0
58	Molecular morphological effects to optoelectronics. , 2007, , .		0
59	Between Quantum and Classical: Evolution of Electron Magnetic Resonance with Growth of a Spin System Size. Materials Research Society Symposia Proceedings, 2014, 1636, 1.	0.1	0
60	Effect of metal and dielectric environments on emission kinetics of HITC dye (Conference) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Td		0
61	Erbium-doped zinc-oxide waveguide amplifiers for hybrid photonic integrated circuits. Proceedings of SPIE, 2016, , .	0.8	0
62	Morphology of Organic Thin Films on Silicon Substrate. , 2002, , .		0
63	Concentration dependence on the linear and non-linear optical properties of Disperse Red 19 doped polymers. , 2002, , .		0
64	Measurement of the electro-optic coefficient of a range of polymer film concentrations by the two-slit interference technique. , 2003, , .		0
65	Emission dynamics of donor and acceptor substituted PPV for photovoltaic applications. , 2003, , .		0
66	Optical and electronic properties of polyphenylvinylene block copolymer films and devices. , 2005, , .		0
67	Optimization of Organic Solar Cells in Both Space and Energyâ€šÃ„Ã¬Time Domains. Optical Science and Engineering, 2005, , .	0.1	0
68	Chemical and charge transfer studies on interfaces of a conjugated polymer and ITO. , 2017, , .		0