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Graphene photonics
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Broadband enhancement in thin-film amorphous silicon solar cells enabled by nucleated silver nanoparticles X Chen, B Jia, JK Saha, B Cai, N Stokes, Q Qiao, Y Wang, Z Shi, M Gu Nano letters 12 (5), 2187-2192	246	2012
Exceeding the limit of plasmonic light trapping in textured screen-printed solar cells using Al nanoparticles and wrinkle-like graphene sheets X Chen, B Jia, Y Zhang, M Gu Light: Science & Applications 2 (8), e92	161	2013
Nanostructured plasmonic medium for terahertz bandwidth all-optical switching M Ren, B Jia, JY Ou, E Plum, J Zhang, KF MacDonald, AE Nikolaenko, ... Advanced Materials 23 (46), 5540-5544	107	2011
Low cost and high performance Al nanoparticles for broadband light trapping in Si wafer solar cells Y Zhang, Z Ouyang, N Stokes, B Jia, Z Shi, M Gu Applied Physics Letters 100 (15), 151101	101	2012
Observation of the inverse Doppler effect in negative-index materials at optical frequencies J Chen, Y Wang, B Jia, T Geng, X Li, L Feng, W Qian, B Liang, X Zhang, ... Nature Photonics 5 (4), 239	98	2011
High-photosensitive resin for super-resolution direct-laser-writing based on photoinhibited polymerization Y Cao, Z Gan, B Jia, RA Evans, M Gu Optics express 19 (20), 19486-19494	80	2011
Towards ultra-thin plasmonic silicon wafer solar cells with minimized efficiency loss Y Zhang, N Stokes, B Jia, S Fan, M Gu Scientific reports 4, 4939	76	2014
Nanoplasmonics: a frontier of photovoltaic solar cells M Gu, Z Ouyang, B Jia, N Stokes, X Chen, N Fahim, X Li, MJ Ventura, ... Nanophotonics 1 (3-4), 235-248	70	2012
Direct measurement of a radially polarized focused evanescent field facilitated by a single LCD B Jia, X Gan, M Gu Optics express 13 (18), 6821-6827	70	2005
Perovskite-based low-cost and high-efficiency hybrid halide solar cells J Fan, B Jia, M Gu Photonics Research 2 (5), 111-120	65	2014

TITLE	CITED BY	YEAR
Direct observation of a pure focused evanescent field of a high numerical aperture objective lens by scanning near-field optical microscopy B Jia, X Gan, M Gu Applied Physics Letters 86 (13), 131110	64	2005
A metamaterial emitter for highly efficient radiative cooling MM Hossain, B Jia, M Gu Advanced Optical Materials 3 (8), 1047-1051	62	2015
Fabrication of three-dimensional woodpile photonic crystals in a PbSe quantum dot composite material J Li, B Jia, G Zhou, M Gu Optics express 14 (22), 10740-10745	60	2006
Dynamic generation of Debye diffraction-limited multifocal arrays for direct laser printing nanofabrication H Lin, B Jia, M Gu Optics letters 36 (3), 406-408	56	2011
Evolutionary topology optimization of periodic composites for extremal magnetic permeability and electrical permittivity X Huang, YM Xie, B Jia, Q Li, SW Zhou Structural and Multidisciplinary Optimization 46 (3), 385-398	53	2012
Enhanced photothermal therapy assisted with gold nanorods using a radially polarized beam H Kang, B Jia, J Li, D Morrish, M Gu Applied physics letters 96 (6), 063702	53	2010
Polarization characterization in the focal volume of high numerical aperture objectives H Kang, B Jia, M Gu Optics express 18 (10), 10813-10821	51	2010
Use of radially polarized beams in three-dimensional photonic crystal fabrication with the two-photon polymerization method B Jia, H Kang, J Li, M Gu Optics letters 34 (13), 1918-1920	50	2009
In Situ Third-Order Non-linear Responses During Laser Reduction of Graphene Oxide Thin Films Towards On-Chip Non-linear Photonic Devices X Zheng, B Jia, X Chen, M Gu Advanced Materials 26 (17), 2699-2703	49	2014
Spectral redistribution in spontaneous emission from quantum-dot-infiltrated 3D woodpile photonic crystals for telecommunications J Li, B Jia, G Zhou, C Bullen, J Serbin, M Gu Advanced Materials 19 (20), 3276-3280	49	2007