Johann Toudert

List of Publications by Year
in descending order

49 papers	1,310 citations	304743 22 h-index	361022 35 g-index
49 all docs	49 docs citations	49 times ranked	2081 citing authors

#	Article	IF	Citations
1	Nanosecond Laser Switching of Phaseâ€Change Random Metasurfaces with Tunable ONâ€State. Advanced Optical Materials, 2022, 10, 2101405.	7.3	4
2	Topological Materials for Functional Optoelectronic Devices. Advanced Functional Materials, 2022, 32, .	14.9	15
3	Light Recycling Using Perovskite Solar Cells in a Halfâ€Cylinder Photonic Plate for an Energy Efficient Broadband Polarized Light Emission. Advanced Photonics Research, 2021, 2, 2100077.	3.6	2
4	Quantum nanostructures for plasmonics and high refractive index photonics. JPhys Photonics, 2021, 3, 011003.	4.6	4
5	Bismuth-based gap-plasmon metasurfaces for visible photonics with volatile tuning potential. , 2021, , .		0
6	Spectrally Tailored Lightâ€Matter Interaction in Lithographyâ€Free Functional Nanomaterials. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900677.	1.8	4
7	Selfâ€Assembled, 10 nmâ€Tailored, Near Infrared Plasmonic Metasurface Acting as Broadband Omnidirectional Polarizing Mirror. Advanced Optical Materials, 2020, 8, 2000321.	7.3	5
8	Light Harvesting at Oblique Incidence Decoupled from Transmission in Organic Solar Cells Exhibiting 9.8% Efficiency and 50% Visible Light Transparency. Advanced Energy Materials, 2020, 10, 1904196.	19.5	46
9	Relation between Fluorescence Quantum Yield and Openâ€Circuit Voltage in Complete Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900554.	5.8	13
10	Active analog tuning of the phase of light in the visible regime by bismuth-based metamaterials. Nanophotonics, 2020, 9, 885-896.	6.0	9
11	Inverse Optical Cavity Design for Ultrabroadband Light Absorption Beyond the Conventional Limit in Lowâ€Bandgap Nonfullerene Acceptorâ€“Based Solar Cells. Advanced Energy Materials, 2019, 9, 1900463.	19.5	24
12	Formamidinium Incorporation into Compact Lead Iodide for Low Band Gap Perovskite Solar Cells with Open-Circuit Voltage Approaching the Radiative Limit. ACS Applied Materials & Interfaces, 2019, 11, 9083-9092.	8.0	9
13	Ergodic Light Propagation in a Halfâ€Cylinder Photonic Plate for Optimal Absorption in Perovskite Solar Cells. Advanced Optical Materials, 2019, 7, 1900018.	7.3	11
14	Conformal covering and optical response of pulsed laser deposited bidimensional Ag nanoparticle arrays. Applied Surface Science, 2019, 473, 442-448.	6.1	2
15	Optical properties of bismuth nanostructures towards the ultrathin film regime. Optical Materials Express, 2019, 9, 2924.	3.0	17
16	Selfâ€Assembled Nanostructured Photonicâ€Plasmonic Metasurfaces for Highâ€Resolution Optical Thermometry. Advanced Materials Interfaces, 2018, 5, 1800241.	3.7	9
17	Natural Random Nanotexturing of the Au Interface for Light Backscattering Enhanced Performance in Perovskite Solar Cells. ACS Photonics, 2018, 5, 2243-2250.	6.6	39
18	Optical management for efficiency enhancement in hybrid organic-inorganic lead halide perovskite solar cells. Science and Technology of Advanced Materials, 2018, 19, 411-424.	6.1	62

#	Article	IF	Citations
19	Nanobismuth: Fabrication, Optical, and Plasmonic Propertiesâ€"Emerging Applications. Journal of Nanotechnology, 2018, 2018, 1-23.	3.4	48
20	Mid-to-far infrared tunable perfect absorption by a sub - Î»/100 nanofilm in a fractal phasor resonant cavity. Optics Express, 2018, 26, 34043.	3.4	24
21	Unveiling the Far Infrared-to-Ultraviolet Optical Properties of Bismuth for Applications in Plasmonics and Nanophotonics. Journal of Physical Chemistry C, 2017, 121, 3511-3521.	3.1	61
22	A Twoâ€Resonance Tapping Cavity for an Optimal Light Trapping in Thinâ€Film Solar Cells. Advanced Energy Materials, 2017, 7, 1700356.	19.5	29
23	Monolithic CIGSâ€"Perovskite Tandem Cell for Optimal Light Harvesting without Current Matching. ACS Photonics, 2017, 4, 861-867.	6.6	27
24	Circumventing UV Light Induced Nanomorphology Disorder to Achieve Long Lifetime PTB7â€Th:PCBM Based Solar Cells. Advanced Energy Materials, 2017, 7, 1701201.	19.5	67
25	High open-circuit voltage and short-circuit current flexible polymer solar cells using ternary blends and ultrathin Ag-based transparent electrodes. Journal of Materials Chemistry A, 2017, 5, 25476-25484.	10.3	25
26	Interband transitions in semi-metals, semiconductors, and topological insulators: a new driving force for plasmonics and nanophotonics [Invited]. Optical Materials Express, 2017, 7, 2299.	3.0	74
27	Ultraviolet-visible interband plasmonics with p-block elements. Optical Materials Express, 2016, 6, 2434.	3.0	28
28	Polaritonic-to-Plasmonic Transition in Optically Resonant Bismuth Nanospheres for High-Contrast Switchable Ultraviolet Meta-Filters. IEEE Photonics Journal, 2016, 8, 1-11.	2.0	20
29	When Eutectics Meet Plasmonics: Nanoplasmonic, Volumetric, Selfâ€Organized, Silverâ€Based Eutectic. Advanced Optical Materials, 2015, 3, 381-389.	7.3	38
30	Plasmonic metamaterials for ultra-sensitive sensing: topological darkness. Rendiconti Lincei, 2015, 26, 175-182.	2.2	11
31	Rare Earth-Ion/Nanosilicon Ultrathin Layer: A Versatile Nanohybrid Light-Emitting Building Block for Active Optical Metamaterials. Journal of Physical Chemistry C, 2015, 119, 11800-11808.	3.1	3
32	Plasmonic Optical Interferences for Phase-Monitored Nanoscale Sensing in Low-Loss Three-Dimensional Metamaterials. ACS Photonics, 2015, 2, 1443-1450.	6.6	20
33	Temperature and atmosphere tunability of the nanoplasmonic resonance of a volumetric eutectic-based Bi_2O_3-Ag metamaterial. Optics Express, 2015, 23, 19098.	3.4	23
34	Annealing Effect on the Structural and Optical Properties of Sputter-Grown Bismuth Titanium Oxide Thin Films. Materials, 2014, 7, 3427-3434.	2.9	7
35	Spectroscopic ellipsometry for active nano- and meta-materials. Nanotechnology Reviews, 2014, 3, .	5.8	21
36	Preventing the Degradation of Ag Nanoparticles Using an Ultrathin a-Al₂O₃ Layer as Protective Barrier. Journal of Physical Chemistry C, 2013, 117, 9431-9439.	3.1	36

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37	Advanced optical effective medium modeling for a single layer of polydisperse ellipsoidal nanoparticles embedded in a homogeneous dielectric medium: Surface plasmon resonances. Physical Review B, 2012, 86, .	3.2	51
38	Exploring the Optical Potential of Nano-Bismuth: Tunable Surface Plasmon Resonances in the Near Ultraviolet-to-Near Infrared Range. Journal of Physical Chemistry C, 2012, 116, 20530-20539.	3.1	182
39	Selective Dichroic Patterning by Nanosecond Laser Treatment of Ag Nanostripes. Advanced Materials, 2011, 23, 848-853.	21.0	37
40	Dichroic Optical Structures: Selective Dichroic Patterning by Nanosecond Laser Treatment of Ag Nanostripes (Adv. Mater. 7/2011). Advanced Materials, 2011, 23, 800-800.	21.0	0
41	Excitation transfer mechanism along the visible to the Near-IR in rhodamine J-heteroaggregates. Chemical Communications, 2010, 46, 4372.	4.1	22
42	Tunable In-Plane Optical Anisotropy of Ag Nanoparticles Deposited by DC Sputtering onto SiO2 Nanocolumnar Films. Plasmonics, 2010, 5, 241-250.	3.4	18
43	Tunable Nanostructure and Photoluminescence of Columnar ZnO Films Grown by Plasma Deposition. Journal of Physical Chemistry C, 2010, 114, 20932-20940.	3.1	30
44	Comments on â€œSurface plasmon resonance of metal nanoparticles sandwiched between dielectric layers: theoretical modelingâ€• Applied Optics, 2010, 49, 3630.	2.1	5
45	Linear and third-order nonlinear optical responses of multilayered Ag:Si3N4nanocomposites. Nanotechnology, 2009, 20, 475705.	2.6	17
46	Enhanced photoluminescence of nanostructured Er3+-doped a-Si/a-Al2O3 thin films prepared by PLD. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 146, 141-145.	3.5	4
47	Quantitative modelling of the surface plasmon resonances of metal nanoclusters sandwiched between dielectric layers: the influence of nanocluster size, shape and organization. Nanotechnology, 2008, 19, 125709.	2.6	45
48	Tailoring of the optical properties of Ag:Si3N4 nanocermets by changes of the cluster morphology. Applied Physics B: Lasers and Optics, 2005, 80, 89-96.	2.2	30
49	Morphology and surface-plasmon resonance of silver nanoparticles sandwiched between Si3N4 and BN layers. Journal of Applied Physics, 2005, 98, 114316.	2.5	32