

# Karthik Shankar

## List of Publications by Year in descending order

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182  
papers

18,548  
citations

28242

55  
h-index

11928

134  
g-index

186  
all docs

186  
docs citations

186  
times ranked

15830  
citing authors

#	ARTICLE	IF	CITATIONS
1	Zinc phthalocyanine conjugated cellulose nanocrystals for memory device applications. <i>Nanotechnology</i> , 2022, 33, 055703.	1.3	7
2	Surface second harmonic generation spectra of titania coated Au NPs. <i>Applied Surface Science</i> , 2022, 581, 152381.	3.1	2
3	Hot hole transfer from Ag nanoparticles to multiferroic $\text{YMn}_2\text{O}_5$ nanowires enables superior photocatalytic activity. <i>Journal of Materials Chemistry C</i> , 2022, 10, 4128-4139.	2.7	7
4	Instantaneous Property Prediction and Inverse Design of Plasmonic Nanostructures Using Machine Learning: Current Applications and Future Directions. <i>Nanomaterials</i> , 2022, 12, 633.	1.9	9
5	Air- and water-stable halide perovskite nanocrystals protected with nearly-monolayer carbon nitride for $\text{CO}_2$ photoreduction and water splitting. <i>Applied Surface Science</i> , 2022, 592, 153276.	3.1	31
6	A Nanometric Probe of the Local Proton Concentration in Microtubule-Based Biophysical Systems. <i>Nano Letters</i> , 2022, 22, 517-523.	4.5	7
7	Synergistic Enhancement of the Photoelectrochemical Performance of $\text{TiO}_2$ Nanorod Arrays through Embedded Plasmon and Surface Carbon Nitride Co-sensitization. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 24309-24320.	4.0	21
8	Switchable $\text{CO}_2$ Electroreduction Induced By the Bismuth Moiety with Tunable Local Structures on Graphene. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2090-2090.	0.0	0
9	$\text{C}_3\text{N}_4$ and $\text{C}_3\text{N}_5$ Nanosheets As Passivation Layers and Carrier Extractors for Inorganic Semiconductor Nanowires and Quantum Dots. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2379-2379.	0.0	0
10	Hot Hole Utilization in Au-TiO <sub>2</sub> and Au-C <sub>3</sub> N <sub>4</sub> -TiO <sub>2</sub> Core-Shell Heterojunctions for High Performance Photoelectrochemical Water Splitting. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 2383-2383.	0.0	1
11	Hot carrier photocatalysis using bimetallic Au@Pt hemispherical core-shell nanoislands. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 18134-18155.	1.1	2
12	Effect of morphology on the photoelectrochemical performance of nanostructured $\text{Cu}_2\text{O}$ photocathodes. <i>Nanotechnology</i> , 2021, 32, 374001.	1.3	7
13	Revealing and Attenuating the Electrostatic Properties of Tubulin and Its Polymers. <i>Small</i> , 2021, 17, 2003560.	5.2	7
14	Nonlithographic Formation of $\text{Ta}_2\text{O}_5$ Nanodimple Arrays Using Electrochemical Anodization and Their Use in Plasmonic Photocatalysis for Enhancement of Local Field and Catalytic Activity. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 4340-4351.	4.0	10
15	Asymmetric Multipole Plasmon-Mediated Catalysis Shifts the Product Selectivity of $\text{CO}_2$ Photoreduction toward $\text{C}_2^+$ Products. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 7248-7258.	4.0	40
16	Artificial Neural Network-Based Prediction of the Optical Properties of Spherical Core-Shell Plasmonic Metastructures. <i>Nanomaterials</i> , 2021, 11, 633.	1.9	13
17	Modeling Microtubule Counterion Distributions and Conductivity Using the Poisson-Boltzmann Equation. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 650757.	1.6	11
18	Hot Electrons in $\text{TiO}_2$ -Noble Metal Nano-Heterojunctions: Fundamental Science and Applications in Photocatalysis. <i>Nanomaterials</i> , 2021, 11, 1249.	1.9	40

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19	Effect of sulfur-doped graphene quantum dots incorporation on morphological, optical and electron transport properties of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> perovskite thin films. Journal of Materials Science: Materials in Electronics, 2021, 32, 17406-17417.	1.1	17
20	Water-splitting photoelectrodes consisting of heterojunctions of carbon nitride with a p-type low bandgap double perovskite oxide. Nanotechnology, 2021, 32, 485407.	1.3	13
21	Synthesis, characterization, and visible light photocatalytic activity of solution-processed free-standing 2D Bi <sub>2</sub> O <sub>2</sub> Se nanosheets. Nanotechnology, 2021, 32, 485602.	1.3	16
22	Techno-economic assessment of titanium dioxide nanorod-based perovskite solar cells: From lab-scale to large-scale manufacturing. Applied Energy, 2021, 298, 117251.	5.1	5
23	Harvesting Hot Holes in Plasmon-Coupled Ultrathin Photoanodes for High-Performance Photoelectrochemical Water Splitting. ACS Applied Materials & Interfaces, 2021, 13, 42741-42752.	4.0	24
24	Life cycle assessment of high-performance monocrystalline titanium dioxide nanorod-based perovskite solar cells. Solar Energy Materials and Solar Cells, 2021, 230, 111288.	3.0	10
25	Photocatalytic Mechanism Control and Study of Carrier Dynamics in CdS@C <sub>3</sub> N <sub>5</sub> Core-Shell Nanowires. ACS Applied Materials & Interfaces, 2021, 13, 47418-47439.	4.0	48
26	TiO <sub>2</sub> -HfN Radial Nano-Heterojunction: A Hot Carrier Photoanode for Sunlight-Driven Water-Splitting. Catalysts, 2021, 11, 1374.	1.6	8
27	Detecting Charge Separation in Optoelectronic Materials and Devices Using Planar Microwave Resonators: An Overview. , 2021, , .		0
28	Heterojunctions of halogen-doped carbon nitride nanosheets and BiOI for sunlight-driven water-splitting. Nanotechnology, 2020, 31, 084001.	1.3	23
29	CVD grown nitrogen doped graphene is an exceptional visible-light driven photocatalyst for surface catalytic reactions. 2D Materials, 2020, 7, 015002.	2.0	12
30	Double peak emission in lead halide perovskites by self-absorption. Journal of Materials Chemistry C, 2020, 8, 2289-2300.	2.7	72
31	Consistently High $V_{oc}$ Values in p-i-n Type Perovskite Solar Cells Using Ni <sup>3+</sup> -Doped NiO Nanomesh as the Hole Transporting Layer. ACS Applied Materials & Interfaces, 2020, 12, 11467-11478.	4.0	48
32	Noble Metal Free, Visible Light Driven Photocatalysis Using TiO <sub>2</sub> Nanotube Arrays Sensitized by P-doped C <sub>3</sub> N <sub>4</sub> Quantum Dots. Advanced Optical Materials, 2020, 8, 1901275.	3.6	48
33	Planar microwave resonator with electrodeposited ZnO thin film for ultraviolet detection. Semiconductor Science and Technology, 2020, 35, 025003.	1.0	11
34	Unusual Surface Ligand Doping-Induced p-Type Quantum Dot Solids and Their Application in Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 53942-53949.	4.0	9
35	All Wired Up: An Exploration of the Electrical Properties of Microtubules and Tubulin. ACS Nano, 2020, 14, 16301-16320.	7.3	22
36	Synthesis and Characterization of Zinc Phthalocyanine-Cellulose Nanocrystal (CNC) Conjugates: Toward Highly Functional CNCs. ACS Applied Materials & Interfaces, 2020, 12, 43992-44006.	4.0	16

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37	Phase Evolution in Methylammonium Tin Halide Perovskites with Variable Temperature Solid-State $^{119}\text{Sn}$ NMR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2020, 124, 15015-15027.	1.5	24
38	Plasmonic photocatalysis and SERS sensing using ellipsometrically modeled Ag nanoisland substrates. <i>Nanotechnology</i> , 2020, 31, 365301.	1.3	19
39	Investigation of the Electrical Properties of Microtubule Ensembles under Cell-Like Conditions. <i>Nanomaterials</i> , 2020, 10, 265.	1.9	14
40	Revealing and Attenuating the Electrostatic Properties of Tubulin and Microtubules. <i>Biophysical Journal</i> , 2020, 118, 622a.	0.2	0
41	Microtubules as Sub-Cellular Memristors. <i>Scientific Reports</i> , 2020, 10, 2108.	1.6	35
42	Optical control of selectivity of high rate $\text{CO}_2$ photoreduction via interband- or hot electron Z-scheme reaction pathways in Au-TiO <sub>2</sub> plasmonic photonic crystal photocatalyst. <i>Applied Catalysis B: Environmental</i> , 2020, 267, 118644.	10.8	92
43	Investigating the Tetragonal to Orthorhombic Phase Transition of Methylammonium Lead Iodide Single Crystals by Detailed Photoluminescence Analysis. <i>Advanced Optical Materials</i> , 2020, 8, 2000455.	3.6	23
44	Mapping the surface potential, charge density and adhesion of cellulose nanocrystals using advanced scanning probe microscopy. <i>Carbohydrate Polymers</i> , 2020, 246, 116393.	5.1	9
45	High rate $\text{CO}_2$ photoreduction using flame annealed TiO <sub>2</sub> nanotubes. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 522-536.	10.8	123
46	Behavior of $\hat{1}\pm, \hat{1}^2$ tubulin in DMSO-containing electrolytes. <i>Nanoscale Advances</i> , 2019, 1, 3364-3371.	2.2	6
47	Fabrication of Phase Change Microstring Resonators via Top Down Lithographic Techniques: Incorporation of VO <sub>2</sub> /TiO <sub>2</sub> Into Conventional Processes. <i>Journal of Microelectromechanical Systems</i> , 2019, 28, 766-775.	1.7	4
48	Robust Polymer Nanocomposite Membranes Incorporating Discrete TiO <sub>2</sub> Nanotubes for Water Treatment. <i>Nanomaterials</i> , 2019, 9, 1186.	1.9	43
49	Triplet excitons: improving exciton diffusion length for enhanced organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2019, 7, 2445-2463.	5.2	47
50	Plexcitonics – fundamental principles and optoelectronic applications. <i>Journal of Materials Chemistry C</i> , 2019, 7, 1821-1853.	2.7	89
51	Enhanced charge separation in g-C <sub>3</sub> N <sub>4</sub> –BiOI heterostructures for visible light driven photoelectrochemical water splitting. <i>Nanoscale Advances</i> , 2019, 1, 1460-1471.	2.2	115
52	Vapor growth of binary and ternary phosphorus-based semiconductors into TiO <sub>2</sub> nanotube arrays and application in visible light driven water splitting. <i>Nanoscale Advances</i> , 2019, 1, 2881-2890.	2.2	11
53	Multiscale modeling of active layer of hybrid organic-inorganic solar cells for photovoltaic applications by means of density functional theory and integral equation theory of molecular liquids. <i>Journal of Molecular Liquids</i> , 2019, 289, 110997.	2.3	6
54	Vapor Deposition of Semiconducting Phosphorus Allotropes into TiO <sub>2</sub> Nanotube Arrays for Photoelectrocatalytic Water Splitting. <i>ACS Applied Nano Materials</i> , 2019, 2, 3358-3367.	2.4	30

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55	Transparent nanoporous P-type NiO films grown directly on non-native substrates by anodization. Journal of Materials Science: Materials in Electronics, 2019, 30, 11327-11335.	1.1	4
56	Hybrid Materials: Flexible and Ultrasoft Inorganic 1D Semiconductor and Heterostructure Systems Based on SnIP (Adv. Funct. Mater. 18/2019). Advanced Functional Materials, 2019, 29, 1970120.	7.8	0
57	A Rational Design of Cu <sub>2</sub> O@SnO <sub>2</sub> Core-Shell Catalyst for Highly Selective CO <sub>2</sub> to CO Conversion. ChemCatChem, 2019, 11, 4147-4153.	1.8	22
58	Flexible and Ultrasoft Inorganic 1D Semiconductor and Heterostructure Systems Based on SnIP. Advanced Functional Materials, 2019, 29, 1900233.	7.8	37
59	Nanophotonic enhancement and improved electron extraction in perovskite solar cells using near-horizontally aligned TiO <sub>2</sub> nanorods. Journal of Power Sources, 2019, 417, 176-187.	4.0	17
60	C <sub>3</sub> N <sub>5</sub> : A Low Bandgap Semiconductor Containing an Azo-Linked Carbon Nitride Framework for Photocatalytic, Photovoltaic and Adsorbent Applications. Journal of the American Chemical Society, 2019, 141, 5415-5436.	6.6	464
61	Remarkable self-organization and unusual conductivity behavior in cellulose nanocrystal-PEDOT: PSS nanocomposites. Journal of Materials Science: Materials in Electronics, 2019, 30, 1390-1399.	1.1	16
62	High Breakdown Strength Schottky Diodes Made from Electrodeposited ZnO for Power Electronics Applications. ACS Applied Electronic Materials, 2019, 1, 13-17.	2.0	14
63	Preferentially oriented TiO <sub>2</sub> nanotube arrays on non-native substrates and their improved performance as electron transporting layer in halide perovskite solar cells. Nanotechnology, 2019, 30, 204003.	1.3	17
64	Hexagonal Double Perovskite Cs <sub>2</sub> AgCrCl <sub>6</sub> . Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2019, 645, 323-328.	0.6	16
65	Threshold hydrophobicity for inhibition of salt scale formation on SAM-modified titania nanotube arrays. Applied Surface Science, 2019, 473, 282-290.	3.1	15
66	(Invited) Use of Periodic Pulses and Non-Native Substrates to Form Nanoporous Metal Oxide Films By Anodization. ECS Meeting Abstracts, 2019, , .	0.0	0
67	Abstract 3724: Molecular mechanisms of TField action determined by measurements and modelling of electro-conductive properties of microtubules. , 2019, , .		0
68	Ultraviolet sensing using a TiO <sub>2</sub> nanotube integrated high resolution planar microwave resonator device. Nanoscale, 2018, 10, 4882-4889.	2.8	34
69	Mechanochemical Synthesis of Methylammonium Lead Mixed-Halide Perovskites: Unraveling the Solid-Solution Behavior Using Solid-State NMR. Chemistry of Materials, 2018, 30, 2309-2321.	3.2	85
70	Core-shell titanium dioxide-titanium nitride nanotube arrays with near-infrared plasmon resonances. Nanotechnology, 2018, 29, 154006.	1.3	40
71	Composition-Tunable Formamidinium Lead Mixed Halide Perovskites via Solvent-Free Mechanochemical Synthesis: Decoding the Pb Environments Using Solid-State NMR Spectroscopy. Journal of Physical Chemistry Letters, 2018, 9, 2671-2677.	2.1	74
72	Top-Down Approaches Towards Single Crystal Perovskite Solar Cells. Scientific Reports, 2018, 8, 4906.	1.6	34

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73	A review on photocatalytic CO <sub>2</sub> reduction using perovskite oxide nanomaterials. Nanotechnology, 2018, 29, 052001.	1.3	192
74	Heterojunctions of mixed phase TiO <sub>2</sub> nanotubes with Cu, CuPt, and Pt nanoparticles: interfacial band alignment and visible light photoelectrochemical activity. Nanotechnology, 2018, 29, 014002.	1.3	22
75	EXTH-74. MOLECULAR MECHANISMS OF ANTI-TUMOR ACTION OF TTFIELDS DETERMINED BY MEASUREMENTS AND MODELING OF ELECTRO-CONDUCTIVE PROPERTIES OF MICROTUBULES. Neuro-Oncology, 2018, 20, vi101-vi101.	0.6	0
76	Resistance of Superhydrophobic Surface-Functionalized TiO <sub>2</sub> Nanotubes to Corrosion and Intense Cavitation. Nanomaterials, 2018, 8, 783.	1.9	18
77	Melanin-based electronics: From proton conductors to photovoltaics and beyond. Biosensors and Bioelectronics, 2018, 122, 127-139.	5.3	60
78	Sunlight-driven water-splitting using two-dimensional carbon based semiconductors. Journal of Materials Chemistry A, 2018, 6, 12876-12931.	5.2	215
79	Arrays of TiO <sub>2</sub> nanorods embedded with fluorine doped carbon nitride quantum dots (CNFQDs) for visible light driven water splitting. Carbon, 2018, 137, 174-187.	5.4	70
80	Distinguishing between Deep Trapping Transients of Electrons and Holes in TiO <sub>2</sub> Nanotube Arrays Using Planar Microwave Resonator Sensor. ACS Applied Materials & Interfaces, 2018, 10, 29857-29865.	4.0	17
81	All-solution processed, scalable superhydrophobic coatings on stainless steel surfaces based on functionalized discrete titania nanotubes. Chemical Engineering Journal, 2018, 351, 482-489.	6.6	24
82	All-solid-state formation of titania nanotube arrays and their application in photoelectrochemical water splitting. Journal of Materials Science: Materials in Electronics, 2018, 29, 16590-16597.	1.1	1
83	Organic-Inorganic Nanohybrid Materials for Photovoltaic Applications. ECS Transactions, 2018, 85, 543-550.	0.3	1
84	Abstract 3195: The molecular mechanism of action and cellular targets of TTFIELDS. , 2018, , .		0
85	100-fold improvement in carrier drift mobilities in alkanephosphonate-passivated monocrystalline TiO <sub>2</sub> nanowire arrays. Nanotechnology, 2017, 28, 144001.	1.3	23
86	Multiscale Computational Study of Electronic Structure and Properties of Electrochemical Nano-Systems of Perovskites for Photovoltaic Application. ECS Transactions, 2017, 75, 59-68.	0.3	1
87	Halide perovskite solar cells using monocrystalline TiO <sub>2</sub> nanorod arrays as electron transport layers: impact of nanorod morphology. Nanotechnology, 2017, 28, 274001.	1.3	67
88	Radial Heterojunction Solar Cell Consisting of n-Type Rutile Nanowire Arrays Infiltrated by p-Type CdTe. Journal of Nanoscience and Nanotechnology, 2017, 17, 5119-5123.	0.9	4
89	Reduced Ensemble Plasmon Line Widths and Enhanced Two-Photon Luminescence in Anodically Formed High Surface Area Au@TiO <sub>2</sub> 3D Nanocomposites. ACS Applied Materials & Interfaces, 2017, 9, 740-749.	4.0	23
90	Multinuclear Magnetic Resonance Tracking of Hydro, Thermal, and Hydrothermal Decomposition of CH <sub>3</sub> NH <sub>3</sub> Pb <sub>3</sub> . Journal of Physical Chemistry C, 2017, 121, 1013-1024.	1.5	77

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91	Anodic copper oxide nanowire and nanopore arrays with mixed phase content: synthesis, characterization and optical limiting response. <i>Journal of Physics Communications</i> , 2017, 1, 045012.	0.5	8
92	Response to Alternating Electric Fields of Tubulin Dimers and Microtubule Ensembles in Electrolytic Solutions. <i>Scientific Reports</i> , 2017, 7, 9594.	1.6	28
93	Optical anisotropy in vertically oriented TiO <sub>2</sub> nanotube arrays. <i>Nanotechnology</i> , 2017, 28, 374001.	1.3	14
94	Plasmon-enhanced SERS detection of small molecules: Au nanoparticle-embedded TiO <sub>2</sub> nanotubes as high Q-factor sensor substrates. , 2017, , .		0
95	The Morphology of TiO <sub>2</sub> Nanotube Arrays Grown from Atomically Peened and Non-Atomically Peened Ti Films. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 4936-4945.	0.9	3
96	One-Dimensional Electron Transport Layers for Perovskite Solar Cells. <i>Nanomaterials</i> , 2017, 7, 95.	1.9	41
97	Bulk Heterojunction Solar Cells Based on Blends of Conjugated Polymers with II-VI and IV-VI Inorganic Semiconductor Quantum Dots. <i>Polymers</i> , 2017, 9, 35.	2.0	45
98	Optical Limiting in Cu/CuO Nanostructures Formed by Magnetic Field-Assisted Anodization. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 5019-5023.	0.9	1
99	Abstract 5228: The impact of microtubules on solution conductance and capacitance; implications for the use of AC electric fields in cancer therapy. , 2017, , .		0
100	The Effect of Molecular Structure and Environment on the Miscibility and Diffusivity in Polythiophene-Methanofullerene Bulk Heterojunctions: Theory and Modeling with the RISM Approach. <i>Polymers</i> , 2016, 8, 136.	2.0	4
101	Microwave resonator sensor integrated with nanostructured semiconductor membranes for photodetection and carrier lifetime measurement. , 2016, , .		1
102	TiO <sub>2</sub> Nanotube Arrays: Growth and Application. , 2016, , 4189-4204.		0
103	Exciton Binding Energy in Organic-Inorganic Tri-Halide Perovskites. <i>Journal of Nanoscience and Nanotechnology</i> , 2016, 16, 5890-5901.	0.9	24
104	Effect of phosphonate monolayer adsorbate on the microwave photoresponse of TiO <sub>2</sub> nanotube membranes mounted on a planar double ring resonator. <i>Nanotechnology</i> , 2016, 27, 375201.	1.3	37
105	Enhanced CH <sub>4</sub> yield by photocatalytic CO <sub>2</sub> reduction using TiO <sub>2</sub> nanotube arrays grafted with Au, Ru, and ZnPd nanoparticles. <i>Nano Research</i> , 2016, 9, 3478-3493.	5.8	126
106	Charge transport, doping and luminescence in solution-processed, phosphorescent, air-stable tellurophene thin films. <i>Organic Electronics</i> , 2016, 39, 153-162.	1.4	10
107	Hierarchical rutile TiO <sub>2</sub> aggregates: A high photonic strength material for optical and optoelectronic devices. <i>Acta Materialia</i> , 2016, 119, 92-103.	3.8	30
108	Communication-High Performance Schottky Diodes on Flexible Substrates Using ZnO Electrodeposited on Cu. <i>ECS Journal of Solid State Science and Technology</i> , 2016, 5, P324-P326.	0.9	6

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109	Selective microwave sensors exploiting the interaction of analytes with trap states in TiO <sub>2</sub> nanotube arrays. <i>Nanoscale</i> , 2016, 8, 7466-7473.	2.8	69
110	Low residual donor concentration and enhanced charge transport in low-cost electrodeposited ZnO. <i>Journal of Materials Chemistry C</i> , 2016, 4, 2279-2283.	2.7	8
111	Mapping stresses in high aspect ratio polysilicon electrical through-wafer interconnects. <i>Journal of Micro/ Nanolithography, MEMS, and MOEMS</i> , 2015, 14, 024001.	1.0	1
112	Rutile phase n- and p-type anodic titania nanotube arrays with square-shaped pore morphologies. <i>Chemical Communications</i> , 2015, 51, 7816-7819.	2.2	37
113	Interfacial band alignment for photocatalytic charge separation in TiO <sub>2</sub> nanotube arrays coated with CuPt nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 29723-29733.	1.3	72
114	Liquid Sensing Using Active Feedback Assisted Planar Microwave Resonator. <i>IEEE Microwave and Wireless Components Letters</i> , 2015, 25, 621-623.	2.0	71
115	Effect of sol stabilizer on the structure and electronic properties of solution-processed ZnO thin films. <i>RSC Advances</i> , 2015, 5, 87007-87018.	1.7	35
116	Insights Into the Solution Crystallization of Oriented Alq <sub>3</sub> and Znq <sub>2</sub> Microprisms and Nanorods. <i>Journal of Nanoscience and Nanotechnology</i> , 2015, 15, 6680-6689.	0.9	15
117	Phosphorescence within benzotellurophenes and color tunable tellurophenes under ambient conditions. <i>Chemical Communications</i> , 2015, 51, 5444-5447.	2.2	74
118	Electron Transport, Trapping and Recombination in Anodic TiO <sub>2</sub> Nanotube Arrays. <i>Current Nanoscience</i> , 2015, 11, 593-614.	0.7	38
119	The Wetting Behavior of TiO <sub>2</sub> Nanotube Arrays With Perfluorinated Surface Functionalization. , 2014, , .		2
120	High Performance Zinc Oxide Thin Film Transistors Through Improved Material Processing and Device Design. , 2014, , .		0
121	Majority carrier transport in single crystal rutile nanowire arrays. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014, 8, 512-516.	1.2	16
122	High-mobility solution-processed zinc oxide thin films on silicon nitride. <i>Physica Status Solidi - Rapid Research Letters</i> , 2014, 8, 871-875.	1.2	7
123	Toward single-step anodic fabrication of monodisperse TiO <sub>2</sub> nanotube arrays on non-native substrates. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014, 211, 1113-1121.	0.8	17
124	Magnetic field-assisted electroless anodization: TiO <sub>2</sub> nanotube growth on discontinuous, patterned Ti films. <i>Journal of Materials Chemistry A</i> , 2014, 2, 13810-13816.	5.2	6
125	Anodic Cu <sub>2</sub> S and CuS nanorod and nanowall arrays: preparation, properties and application in CO <sub>2</sub> photoreduction. <i>Nanoscale</i> , 2014, 6, 14305-14318.	2.8	132
126	Amphiphobic surfaces from functionalized TiO <sub>2</sub> nanotube arrays. <i>RSC Advances</i> , 2014, 4, 33587-33598.	1.7	25



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127	Coaxing Solid-State Phosphorescence from Tellurophenes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 4587-4591.	7.2	150
128	Prediction of the Active Layer Nanomorphology in Polymer Solar Cells Using Molecular Dynamics Simulation. <i>ACS Applied Materials &amp; Interfaces</i> , 2013, 5, 4617-4624.	4.0	9
129	Biodiagnostics Using Oriented and Aligned Inorganic Semiconductor Nanotubes and Nanowires. <i>Journal of Nanoscience and Nanotechnology</i> , 2013, 13, 4473-4496.	0.9	12
130	Transparent Anodic TiO <sub>2</sub> Nanotube Arrays on Plastic Substrates for Disposable Biosensors and Flexible Electronics. <i>Journal of Nanoscience and Nanotechnology</i> , 2013, 13, 2885-2891.	0.9	42
131	Effect of the Nature of the Metal Co-Catalyst on CO <sub>2</sub> Photoreduction Using Fast-Grown Periodically Modulated Titanium Dioxide Nanotube Arrays (PMTiNTs). <i>Materials Research Society Symposia Proceedings</i> , 2013, 1578, 1.	0.1	2
132	Multipodal and Multilayer TiO <sub>2</sub> Nanotube Arrays: Hierarchical Structures for Energy Harvesting and Sensing. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1552, 29-34.	0.1	7
133	Photophysics and Energy Transfer Studies of Alq <sub>3</sub> Confined in the Voids of Nanoporous Anodic Alumina. <i>Journal of Nanoscience and Nanotechnology</i> , 2013, 13, 2647-2655.	0.9	5
134	Templating and Pattern Transfer Using Anodized Nanoporous Alumina/Titania. , 2012, , 321-344.		0
135	Thermoelectric Heat Pump. , 2012, , 2741-2741.		0
136	Photocatalytic Conversion of Diluted CO <sub>2</sub> into Light Hydrocarbons Using Periodically Modulated Multiwalled Nanotube Arrays. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 12732-12735.	7.2	150
137	Ultrahigh sensitivity assays for human cardiac troponin I using TiO <sub>2</sub> nanotube arrays. <i>Lab on A Chip</i> , 2012, 12, 821.	3.1	70
138	Schottky Barrier Thin Film Transistors Using Solution-Processed ZnO. <i>ACS Applied Materials &amp; Interfaces</i> , 2012, 4, 1423-1428.	4.0	27
139	Increased detection of human cardiac troponin I by a decrease of nonspecific adsorption in diluted self-assembled monolayers. <i>Applied Surface Science</i> , 2012, 258, 5230-5237.	3.1	10
140	Zinc oxide thin film transistors with Schottky source barriers. <i>Solid-State Electronics</i> , 2012, 76, 104-108.	0.8	56
141	Thermal Actuators. , 2012, , 2680-2697.		1
142	Theoretical Elasticity. , 2012, , 2667-2667.		0
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