

Piyush Kar

List of Publications by Year in descending order

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37
papers

2,085
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304368
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all docs

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docs citations

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times ranked

2968
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Effect of morphology on the photoelectrochemical performance of nanostructured Cu ₂ O photocathodes. Nanotechnology, 2021, 32, 374001. | 1.3 | 7 |
| 2 | Consistently High V_{oc} Values in p-i-n Type Perovskite Solar Cells Using Ni ³⁺ -Doped NiO Nanomesh as the Hole Transporting Layer. ACS Applied Materials & Interfaces, 2020, 12, 11467-11478. | 4.0 | 48 |
| 3 | Noble Metal Free, Visible Light Driven Photocatalysis Using TiO ₂ Nanotube Arrays Sensitized by P-doped C ₃ N ₄ Quantum Dots. Advanced Optical Materials, 2020, 8, 1901275. | 3.6 | 48 |
| 4 | Optical control of selectivity of high rate CO ₂ photoreduction via interband- or hot electron Z-scheme reaction pathways in Au-TiO ₂ plasmonic photonic crystal photocatalyst. Applied Catalysis B: Environmental, 2020, 267, 118644. | 10.8 | 92 |
| 5 | Mapping the surface potential, charge density and adhesion of cellulose nanocrystals using advanced scanning probe microscopy. Carbohydrate Polymers, 2020, 246, 116393. | 5.1 | 9 |
| 6 | High rate CO ₂ photoreduction using flame annealed TiO ₂ nanotubes. Applied Catalysis B: Environmental, 2019, 243, 522-536. | 10.8 | 123 |
| 7 | Behavior of β , γ tubulin in DMSO-containing electrolytes. Nanoscale Advances, 2019, 1, 3364-3371. | 2.2 | 6 |
| 8 | Enhanced charge separation in g-C ₃ N ₄ –BiOI heterostructures for visible light driven photoelectrochemical water splitting. Nanoscale Advances, 2019, 1, 1460-1471. | 2.2 | 115 |
| 9 | Vapor growth of binary and ternary phosphorus-based semiconductors into TiO ₂ nanotube arrays and application in visible light driven water splitting. Nanoscale Advances, 2019, 1, 2881-2890. | 2.2 | 11 |
| 10 | Vapor Deposition of Semiconducting Phosphorus Allotropes into TiO ₂ Nanotube Arrays for Photoelectrocatalytic Water Splitting. ACS Applied Nano Materials, 2019, 2, 3358-3367. | 2.4 | 30 |
| 11 | 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 |
| 12 | Nanophotonic enhancement and improved electron extraction in perovskite solar cells using near-horizontally aligned TiO ₂ nanorods. Journal of Power Sources, 2019, 417, 176-187. | 4.0 | 17 |
| 13 | C ₃ N ₅ : 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 |
| 14 | 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 |
| 15 | Threshold hydrophobicity for inhibition of salt scale formation on SAM-modified titania nanotube arrays. Applied Surface Science, 2019, 473, 282-290. | 3.1 | 15 |
| 16 | Ultraviolet sensing using a TiO ₂ nanotube integrated high resolution planar microwave resonator device. Nanoscale, 2018, 10, 4882-4889. | 2.8 | 34 |
| 17 | Core-shell titanium dioxide-titanium nitride nanotube arrays with near-infrared plasmon resonances. Nanotechnology, 2018, 29, 154006. | 1.3 | 40 |
| 18 | A review on photocatalytic CO ₂ reduction using perovskite oxide nanomaterials. Nanotechnology, 2018, 29, 052001. | 1.3 | 192 |

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|----|---|-----|-----------|
| 19 | Heterojunctions of mixed phase TiO ₂ nanotubes with Cu, CuPt, and Pt nanoparticles: interfacial band alignment and visible light photoelectrochemical activity. <i>Nanotechnology</i> , 2018, 29, 014002. | 1.3 | 22 |
| 20 | Resistance of Superhydrophobic Surface-Functionalized TiO ₂ Nanotubes to Corrosion and Intense Cavitation. <i>Nanomaterials</i> , 2018, 8, 783. | 1.9 | 18 |
| 21 | Arrays of TiO ₂ nanorods embedded with fluorine doped carbon nitride quantum dots (CNFQDs) for visible light driven water splitting. <i>Carbon</i> , 2018, 137, 174-187. | 5.4 | 70 |
| 22 | All-solution processed, scalable superhydrophobic coatings on stainless steel surfaces based on functionalized discrete titania nanotubes. <i>Chemical Engineering Journal</i> , 2018, 351, 482-489. | 6.6 | 24 |
| 23 | Halide perovskite solar cells using monocrystalline TiO ₂ nanorod arrays as electron transport layers: impact of nanorod morphology. <i>Nanotechnology</i> , 2017, 28, 274001. | 1.3 | 67 |
| 24 | Radial Heterojunction Solar Cell Consisting of n-Type Rutile Nanowire Arrays Infiltrated by p-Type CdTe. <i>Journal of Nanoscience and Nanotechnology</i> , 2017, 17, 5119-5123. | 0.9 | 4 |
| 25 | Reduced Ensemble Plasmon Line Widths and Enhanced Two-Photon Luminescence in Anodically Formed High Surface Area Au@TiO ₂ 3D Nanocomposites. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 740-749. | 4.0 | 23 |
| 26 | Response to Alternating Electric Fields of Tubulin Dimers and Microtubule Ensembles in Electrolytic Solutions. <i>Scientific Reports</i> , 2017, 7, 9594. | 1.6 | 28 |
| 27 | Optical anisotropy in vertically oriented TiO ₂ nanotube arrays. <i>Nanotechnology</i> , 2017, 28, 374001. | 1.3 | 14 |
| 28 | Effect of phosphonate monolayer adsorbate on the microwave photoresponse of TiO ₂ nanotube membranes mounted on a planar double ring resonator. <i>Nanotechnology</i> , 2016, 27, 375201. | 1.3 | 37 |
| 29 | Enhanced CH ₄ yield by photocatalytic CO ₂ reduction using TiO ₂ nanotube arrays grafted with Au, Ru, and ZnPd nanoparticles. <i>Nano Research</i> , 2016, 9, 3478-3493. | 5.8 | 126 |
| 30 | 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 |
| 31 | 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 |
| 32 | Electron Transport, Trapping and Recombination in Anodic TiO ₂ Nanotube Arrays. <i>Current Nanoscience</i> , 2015, 11, 593-614. | 0.7 | 38 |
| 33 | Anodic Cu ₂ S and CuS nanorod and nanowall arrays: preparation, properties and application in CO ₂ photoreduction. <i>Nanoscale</i> , 2014, 6, 14305-14318. | 2.8 | 132 |
| 34 | Biodiagnostics Using Oriented and Aligned Inorganic Semiconductor Nanotubes and Nanowires. <i>Journal of Nanoscience and Nanotechnology</i> , 2013, 13, 4473-4496. | 0.9 | 12 |
| 35 | Transparent Anodic TiO ₂ 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 |
| 36 | Ultrahigh sensitivity assays for human cardiac troponin I using TiO ₂ nanotube arrays. <i>Lab on A Chip</i> , 2012, 12, 821. | 3.1 | 70 |

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|----|--|-----|-----------|
| 37 | Formation and stability of anatase phase of phosphate incorporated and carbon doped titania nanotubes. Materials Research Bulletin, 2009, 44, 398-402. | 2.7 | 15 |