

Ranveer Singh

List of Publications by Year in descending order

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57
papers

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567281
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docs citations

57
times ranked

644
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Nanoscale visualization of hot carrier generation and transfer at non-noble metal and oxide interface. Journal of Materials Science and Technology, 2022, 98, 151-159. | 10.7 | 4 |
| 2 | Highly transparent conducting Two-Dimensional electron gas channel in ultrathin heterostructures for flexible optoelectronic device applications. Applied Surface Science, 2022, 580, 152266. | 6.1 | 3 |
| 3 | Substrate roughness and crystal orientation-controlled growth of ultra-thin BN films deposited on Cu foils. Applied Physics A: Materials Science and Processing, 2022, 128, . | 2.3 | 4 |
| 4 | Highly transparent solid-state artificial synapse based on oxide memristor. Applied Surface Science, 2021, 536, 147738. | 6.1 | 24 |
| 5 | Morphology-dependent optical and wetting behavior of GLAD PTFE thin films. Journal of Coatings Technology Research, 2021, 18, 173-182. | 2.5 | 2 |
| 6 | Improved photovoltaic performance of CdTe-based solar cells: Roles of using a hole-blocking layer and nanoscale imaging of barrier height at interfaces. Solar Energy, 2021, 215, 1-11. | 6.1 | 8 |
| 7 | Confined interfacial alloying of multilayered Pd-Ni nanocatalyst for widening hydrogen detection capacity. Sensors and Actuators B: Chemical, 2021, 330, 129378. | 7.8 | 6 |
| 8 | Controlled creation and annihilation of isolated robust emergent magnetic monopole like charged vertices in square artificial spin ice. Scientific Reports, 2021, 11, 13593. | 3.3 | 2 |
| 9 | Substrate-morphology driven tunable nanoscale artificial synapse. Journal of Asian Ceramic Societies, 2021, 9, 1137-1146. | 2.3 | 2 |
| 10 | A multifunctional TiN/Ni electrode for wearable supercapacitor and sensor with an insight into charge storage mechanism. Applied Surface Science, 2021, 555, 149718. | 6.1 | 20 |
| 11 | Femtojoule-Consuming Synaptic Memtransistor Based on Mott Transition of Multiphasic Vanadium Oxides. Advanced Functional Materials, 2021, 31, 2102567. | 14.9 | 18 |
| 12 | Ion Beam-Mediated Defect Engineering in TiO _x Thin Films for Controlled Resistive Switching Property and Application. ACS Applied Electronic Materials, 2021, 3, 3804-3814. | 4.3 | 12 |
| 13 | Femto-second and nanoscale hot carrier dynamics in ZnO/Al ₂ O ₃ /Ag-NWs/FTO heterojunction. Journal of Alloys and Compounds, 2021, 872, 159657. | 5.5 | 4 |
| 14 | Electric Field-Induced Area Scalability toward the Multilevel Resistive Switching. Advanced Materials Interfaces, 2021, 8, 2100664. | 3.7 | 8 |
| 15 | Surface hydrogenation of vanadium dioxide nanobeam to manipulate insulator-to-metal transition using hydrogen plasma. Journal of Asian Ceramic Societies, 2021, 9, 1310-1319. | 2.3 | 4 |
| 16 | Nitrogen-doped carbon dot anchored 1-D WO ₃ for enhanced solar water splitting: A nano surface imaging evidence of charge separation and accumulation. International Journal of Hydrogen Energy, 2021, 46, 32546-32558. | 7.1 | 13 |
| 17 | Enhanced solar water splitting of an ideally doped and work function tuned {002} oriented one-dimensional WO ₃ with nanoscale surface charge mapping insights. Applied Catalysis B: Environmental, 2021, 295, 120269. | 20.2 | 43 |
| 18 | Carrier selective MoO _x /Si heterojunctions: Role of thickness. Applied Surface Science, 2021, 564, 150316. | 6.1 | 4 |

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|----|--|------|-----------|
| 19 | Enhanced photocatalytic properties of band structure engineered Pd/TiO ₂ via sequential doping. Applied Surface Science, 2021, 570, 151255. | 6.1 | 9 |
| 20 | Femtojouleâ€Powerâ€Consuming Synaptic Memtransistor Based on Mott Transition of Multiphasic Vanadium Oxides (Adv. Funct. Mater. 46/2021). Advanced Functional Materials, 2021, 31, 2170338. | 14.9 | 0 |
| 21 | Multifunctional Nanohybrid of Alumina and Indium Oxide Prepared Using the Atomic Layer Deposition Technique. ACS Applied Materials & Interfaces, 2021, 13, 59115-59125. | 8.0 | 2 |
| 22 | Growth angle-dependent tunable work function and optoelectronic properties of MoO _x thin films. Applied Surface Science, 2020, 507, 144958. | 6.1 | 28 |
| 23 | Growth angle-dependent evolution of morphology and magnetic properties of Co films on highly ordered self-organized Ge substrates. Journal of Magnetism and Magnetic Materials, 2020, 498, 166198. | 2.3 | 3 |
| 24 | Cold cathode electron emission with ultralow turn-on fields from Au-nanoparticle-decorated self-organized Si nanofacets. Journal of Materials Chemistry C, 2020, 8, 16880-16895. | 5.5 | 6 |
| 25 | Tuning field-emission characteristics of ZnO nanorods through defect engineering via O ⁺ ion irradiation. Journal of Applied Physics, 2020, 128, 054304. | 2.5 | 4 |
| 26 | Direct evidence of band-bending at grain boundaries of ZnO:SnO ₂ films: Local probe microscopic studies. Solar Energy, 2020, 208, 275-281. | 6.1 | 15 |
| 27 | Electrically probing differently oriented 1-D nanostructures via C-AFM. AIP Conference Proceedings, 2020, , . | 0.4 | 0 |
| 28 | Brain-like spatiotemporal information processing with nanosized second-order synaptic emulators; â€œsolid-state memory visualizerâ€ Nano Energy, 2020, 76, 105014. | 16.0 | 12 |
| 29 | Photoresponse of pulsed laser deposited ZnO:Cu thin films. Solar Energy, 2020, 207, 228-234. | 6.1 | 9 |
| 30 | Tuning the structural, optical, local work function and field emission properties of molybdenum oxide thin films with oxygen partial pressures. Journal of Applied Physics, 2020, 127, 025301. | 2.5 | 1 |
| 31 | An artificial piezotronic synapse for tactile perception. Nano Energy, 2020, 73, 104756. | 16.0 | 36 |
| 32 | Accessing low-energy magnetic microstates in square artificial spin ice vertices of broken symmetry in static magnetic field. Physical Review B, 2020, 102, . | 3.2 | 7 |
| 33 | Influence of grain size on local work function and optoelectronic properties of n-ZTO/p-Si heterostructures. Applied Surface Science, 2019, 493, 577-586. | 6.1 | 17 |
| 34 | Local surface conductivity mapping of single-layer graphene subject to low energy argon bombardment: Energy loss mechanism and defect induction efficiency. Materials Letters, 2019, 256, 126638. | 2.6 | 1 |
| 35 | Tunable optoelectronic properties of radio frequency sputter-deposited Sb ₂ Se ₃ thin films: Role of growth angle and thickness. Solar Energy, 2019, 194, 716-723. | 6.1 | 4 |
| 36 | Growth of Wafer-Scale ReS ₂ with â€œTunableâ€ Geometry toward Electron Field-Emission Application. ACS Applied Materials & Interfaces, 2019, 11, 35845-35852. | 8.0 | 13 |

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|----|---|-----|-----------|
| 37 | Thermal annealing induced strong photoluminescence enhancement in Ag-TiO ₂ plasmonic nanocomposite thin films. Journal of Alloys and Compounds, 2019, 786, 750-757. | 5.5 | 20 |
| 38 | Optical, Photocatalytic and Wetting Behavior of GLAD N ₂ /TiO ₂ Films. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900021. | 1.8 | 3 |
| 39 | Experimental and simulation studies on temporal evolution of chemically etched Si surface: Tunable light trapping and cold cathode electron emission properties. Journal of Applied Physics, 2019, 125, . | 2.5 | 4 |
| 40 | Effect of Fe ion implantation on the thermoelectric properties and electronic structures of CoSb ₃ thin films. RSC Advances, 2019, 9, 36113-36122. | 3.6 | 17 |
| 41 | Optical band gap, local work function and field emission properties of MBE grown In^{2+} -MoO ₃ nanoribbons. Applied Surface Science, 2019, 476, 691-700. | 6.1 | 28 |
| 42 | Microscopy and spectroscopy study of nanostructural phase transformation from In^{2+} -MoO ₃ to Mo under UHV Ar^{+} MBE conditions. Surface Science, 2019, 682, 64-74. | 1.9 | 9 |
| 43 | Ocular Permeation and Sustained Anti-inflammatory Activity of Dexamethasone from Kaolin Nanodispersion Hydrogel System. Current Eye Research, 2018, 43, 828-838. | 1.5 | 20 |
| 44 | A Fast and Facile Fabrication of PTFE Based Superhydrophobic and Ultra Wideband Angle Insensitive Anti-Reflection Coatings. Physica Status Solidi - Rapid Research Letters, 2018, 12, 1800041. | 2.4 | 5 |
| 45 | Enhanced ultraviolet photo-response in Dy doped ZnO thin film. Journal of Applied Physics, 2018, 123, . | 2.5 | 26 |
| 46 | Strong uniaxial magnetic anisotropy in Co films on highly ordered grating-like nanopatterned Ge surfaces. Nanotechnology, 2018, 29, 125302. | 2.6 | 15 |
| 47 | Intrinsic inhomogeneous barrier height at the n-TiO ₂ /p-Si hole-blocking junction. Applied Surface Science, 2018, 428, 1006-1009. | 6.1 | 20 |
| 48 | A Fast and Facile Fabrication of PTFE Based Superhydrophobic and Ultra Wideband Angle Insensitive Anti-Reflection Coatings (Phys. Status Solidi RRL 6/2018). Physica Status Solidi - Rapid Research Letters, 2018, 12, 1870320. | 2.4 | 0 |
| 49 | White light-driven photo response of TiO ₂ thin films: Influence of substrate texturing. Solar Energy, 2018, 174, 231-239. | 6.1 | 19 |
| 50 | Broadband antireflection property of conformally grown zinc tin oxide thin films on nanorippled- and nanofaceted-Si substrates. Journal Physics D: Applied Physics, 2018, 51, 275305. | 2.8 | 7 |
| 51 | Growth of TiO ₂ thin films on chemically textured Si for solar cell applications as a hole-blocking and antireflection layer. Applied Surface Science, 2017, 418, 225-231. | 6.1 | 44 |
| 52 | Synthesis of p-n junctions in ZnO nanorods by O^{+} ion implantation. Nuclear Instruments & Methods in Physics Research B, 2017, 409, 143-146. | 1.4 | 6 |
| 53 | Temperature dependent optical characterization of Ni-TiO ₂ thin films as potential photocatalytic material. AIP Advances, 2017, 7, 095115. | 1.3 | 6 |
| 54 | Ag nanoparticle decorated molybdenum oxide structures: growth, characterization, DFT studies and their application to enhanced field emission. Nanotechnology, 2017, 28, 415602. | 2.6 | 14 |

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| 55 | Tunable optoelectronic properties of pulsed dc sputter-deposited ZnO:Al thin films: Role of growth angle. Journal of Applied Physics, 2016, 120, . | 2.5 | 16 |
| 56 | Gold-decorated highly ordered self-organized grating-like nanostructures on Ge surface: Kelvin probe force microscopy and conductive atomic force microscopy studies. Nanotechnology, 2016, 27, 435302. | 2.6 | 11 |
| 57 | Self-Powered and High-Performance Alternating Current Photodetectors to enhance Broadband Photodetection. Advanced Electronic Materials, 0, , 2200392. | 5.1 | 2 |