

# Nirmal Kumar

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1818805/publications.pdf>

Version: 2024-02-01

29  
papers

1,158  
citations

394286

19  
h-index

552653

26  
g-index

29  
all docs

29  
docs citations

29  
times ranked

1031  
citing authors

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | Low-cost high entropy alloy (HEA) for high-efficiency oxygen evolution reaction (OER). Nano Research, 2022, 15, 4799-4806.   | 5.8 | 80        |
| 2  | Nanomaterials Based Biosensing: Methods and Principle of Detection. Materials Horizons, 2022, , 1-27.  | 0.3 | 1         |
| 3  | Industry 4.0 and Digitalisation in Healthcare. Materials, 2022, 15, 2140.  | 1.3 | 46        |
| 4  | Thermal Spray Coatings for Electromagnetic Wave Absorption and Interference Shielding: A Review and Future Challenges. Advanced Engineering Materials, 2022, 24, .   | 1.6 | 12        |
| 5  | Cryomilling as environmentally friendly synthesis route to prepare nanomaterials. International Materials Reviews, 2021, 66, 493-532.  | 9.4 | 31        |
| 6  | Easy scalable avenue of anti-bacterial nanocomposites coating containing Ag NPs prepared by cryomilling. Materials Today Communications, 2021, 26, 102020.   | 0.9 | 0         |
| 7  | Potential pathway for recycling of the paper mill sludge compost for brick making. Construction and Building Materials, 2021, 278, 122384.   | 3.2 | 23        |
| 8  | Emergence of machine learning in the development of high entropy alloy and their prospects in advanced engineering applications. Emergent Materials, 2021, 4, 1635-1648.   | 3.2 | 21        |
| 9  | Nature-inspired materials: Emerging trends and prospects. NPC Asia Materials, 2021, 13, .  | 3.8 | 71        |
| 10 | A perspective on the catalysis using the high entropy alloys. Nano Energy, 2021, 88, 106261.   | 8.2 | 87        |
| 11 | Electrooxidation of Hydrazine Utilizing High-Entropy Alloys: Assisting the Oxygen Evolution Reaction at the Thermodynamic Voltage. ACS Catalysis, 2021, 11, 14000-14007.   | 5.5 | 47        |
| 12 | Nanofabrication route to achieve sustainable production of next generation defect-free graphene: analysis and characterisation. Nanofabrication, 2021, 6, 36-43.   | 1.1 | 4         |
| 13 | Multi-component (Ag@Au@Cu@Pd@Pt) alloy nanoparticle-decorated p-type 2D-molybdenum disulfide (MoS <sub>2</sub> ) for enhanced hydrogen sensing. Nanoscale, 2020, 12, 11830-11841.  | 2.8 | 42        |
| 14 | Formic acid and methanol electro-oxidation and counter hydrogen production using nano high entropy catalyst. Materials Today Energy, 2020, 16, 100393.   | 2.5 | 38        |
| 15 | High-Entropy Alloys as Catalysts for the CO <sub>2</sub> and CO Reduction Reactions: Experimental Realization. ACS Catalysis, 2020, 10, 3658-3663.   | 5.5 | 244       |
| 16 | Ultra-Low-Temperature CO Oxidation Activity of Octahedral Site Cobalt Species in Co <sub>3</sub> O <sub>4</sub> Based Catalysts: Unravelling the Origin of the Unique Catalytic Property. Journal of Physical Chemistry C, 2019, 123, 19557-19571. | 1.5 | 41        |
| 17 | Stabilization of a Highly Concentrated Colloidal Suspension of Pristine Metallic Nanoparticles. Langmuir, 2019, 35, 2668-2673.   | 1.6 | 20        |
| 18 | Cryomilling: An environment friendly approach of preparation large quantity ultra refined pure aluminium nanoparticles. Journal of Materials Research and Technology, 2019, 8, 63-74.  | 2.6 | 69        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | The Effect of Configurational Entropy of Mixing on the Design and Development of Novel Materials. Proceedings of the Indian National Science Academy, 2019, , .   | 0.5 | 3         |
| 20 | Effect of Al Addition on the Microstructural Evolution of Equiatomic CoCrFeMnNi Alloy. Transactions of the Indian Institute of Metals, 2018, 71, 2749-2758.   | 0.7 | 21        |
| 21 | Preparation of nanocrystalline high-entropy alloys via cryomilling of cast ingots. Journal of Materials Science, 2018, 53, 13411-13423.   | 1.7 | 55        |
| 22 | Low-Temperature CO Oxidation over Combustion Made Fe- and Cr-Doped Co <sub>3</sub> O <sub>4</sub> Catalysts: Role of Dopant's Nature toward Achieving Superior Catalytic Activity and Stability. Journal of Physical Chemistry C, 2017, 121, 15256-15265. | 1.5 | 67        |
| 23 | Green synthesis of Ag nanoparticles in large quantity by cryomilling. RSC Advances, 2016, 6, 111380-111388.   | 1.7 | 40        |
| 24 | Hollow Gold Nanoprism as Highly Efficient "Single" Nanotransducer for Surface-Enhanced Raman Scattering Applications. Journal of Physical Chemistry C, 2016, 120, 25548-25556.  | 1.5 | 16        |
| 25 | Fabrication of novel cryomill for synthesis of high purity metallic nanoparticles. Review of Scientific Instruments, 2015, 86, 083903.  | 0.6 | 32        |
| 26 | Effect of functional groups (methyl, phenyl) on organic-inorganic hybrid sol-gel silica coatings on surface modified SS 316. Ceramics International, 2012, 38, 6565-6572.   | 2.3 | 27        |
| 27 | Effect of Plasma Surface Pretreatment on Ce <sup>3+</sup> -Doped GPTMS-ZrO <sub>2</sub> Self-Healing Coatings on Aluminum Alloy. ISRN Corrosion, 2012, 2012, 1-9.   | 0.3 | 6         |
| 28 | Large-scale manufacturing route to metamaterial coatings using thermal spray techniques and their response to solar radiation. Emergent Materials, 0, , 1.  | 3.2 | 5         |
| 29 | Role of thermal spray in combating climate change. Emergent Materials, 0, , 1.  | 3.2 | 9         |