

# Udai B Singh

## List of Publications by Year in descending order

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39  
papers

670  
citations

516710

16  
h-index

580821

25  
g-index

39  
all docs

39  
docs citations

39  
times ranked

707  
citing authors

#	ARTICLE	IF	CITATIONS
1	Formation of self-organized nano-dimensional structures on InP surfaces using ion irradiation and their wettability: A study based on experimental and theoretical concepts of surface. Radiation Physics and Chemistry, 2022, 199, 110353.	2.8	6
2	Surface erosion of BaF <sub>2</sub> thin films under SHI irradiation: Angular distribution and role of different substrates. Applied Surface Science, 2021, 551, 149343.	6.1	7
3	Influence of heat on dynamics of surface morphology of Cu film: An experimental and theoretical perspective. Materials Chemistry and Physics, 2021, 267, 124647.	4.0	0
4	Interface modification of Fe/Cr/Al magnetic multilayer by swift heavy ion irradiation. Surfaces and Interfaces, 2021, 26, 101431.	3.0	3
5	Luminescence properties of BaMgAl <sub>10</sub> O <sub>17</sub> : Mn <sup>2+</sup> nanophosphors. Journal of Alloys and Compounds, 2019, 799, 556-562.	5.5	14
6	Enhanced room temperature ferromagnetism and green photoluminescence in Cu doped ZnO thin film synthesised by neutral beam sputtering. Scientific Reports, 2019, 9, 6675.	3.3	86
7	Investigating the effect of material microstructure and irradiation temperature on the radiation tolerance of yttria stabilized zirconia against high energy heavy ions. Journal of Applied Physics, 2019, 125, .	2.5	19
8	SHI induced evolution of surface and wettability of BaF <sub>2</sub> thin films. MRS Advances, 2019, 4, 1667-1672.	0.9	0
9	Probing the temperature effects in the radiation stability of Nd <sub>2</sub> Zr <sub>2</sub> O <sub>7</sub> pyrochlore under swift ion irradiation. Materialia, 2019, 6, 100317.	2.7	36
10	In-situ transport and microstructural evolution in GaN Schottky diodes and epilayers exposed to swift heavy ion irradiation. Journal of Applied Physics, 2018, 123, 161539.	2.5	14
11	Radiation response of nano-crystalline cubic Zirconia: Comparison between nuclear energy loss and electronic energy loss regimes. Nuclear Instruments & Methods in Physics Research B, 2018, 435, 19-24.	1.4	7
12	Large electronic sputtering yield of nanodimensional Au thin films: Dominant role of thermal conductivity and electron phonon coupling factor. Journal of Applied Physics, 2017, 121, .	2.5	22
13	Role of temperature in the radiation stability of yttria stabilized zirconia under swift heavy ion irradiation: A study from the perspective of nuclear reactor applications. Journal of Applied Physics, 2017, 122, .	2.5	25
14	SHI induced surface re-organization of non-amorphisable nanodimensional fluoride thin films. Physical Chemistry Chemical Physics, 2017, 19, 23229-23238.	2.8	6
15	Nanostructuring and wettability of ion treated Au thin films. Journal of Applied Physics, 2017, 122, .	2.5	19
16	The role of ion irradiation in activating silent Raman modes via tuning in plasmonic behaviour and surface disorder of Au/ZnO/Pt NFG system. Europhysics Letters, 2017, 119, 66002.	2.0	2
17	Plasmonic layer enhanced photoelectrochemical response of Fe <sub>2</sub> O <sub>3</sub> photoanodes. Journal of Power Sources, 2016, 315, 152-160.	7.8	28
18	Ion beam induced optical and surface modification in plasmonic nanostructures. Nuclear Instruments & Methods in Physics Research B, 2016, 379, 42-47.	1.4	8

#	ARTICLE	IF	CITATIONS
19	Phase decomposition of AuFe alloy nanoparticles embedded in silica matrix under swift heavy ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2016, 379, 206-210.	1.4	4
20	Insight Mechanisms of Surface Structuring and Wettability of Ion-Treated Ag Thin Films. Journal of Physical Chemistry C, 2016, 120, 5755-5763.	3.1	40
21	Dynamic scaling of swift heavy ion induced surface restructuring of BaF2 thin film. Materials Letters, 2015, 143, 309-311.	2.6	10
22	Study of thickness dependent sputtering in gold thin films by swift heavy ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 496-502.	1.4	8
23	Swift Heavy Ion Irradiation Induced Surface Sputtering And Micro Structural Modification Of Gold Thin Films. Advanced Materials Letters, 2015, 6, 359-364.	0.6	5
24	Synthesis of embedded Au nanostructures by ion irradiation: influence of ion induced viscous flow and sputtering. Beilstein Journal of Nanotechnology, 2014, 5, 105-110.	2.8	15
25	A study on the consequence of swift heavy ion irradiation of Zn-silica nanocomposite thin films: electronic sputtering. Beilstein Journal of Nanotechnology, 2014, 5, 1691-1698.	2.8	6
26	Synthesis of Pt nanoparticles and their burrowing into Si due to synergistic effects of ion beam energy losses. Beilstein Journal of Nanotechnology, 2014, 5, 1864-1872.	2.8	6
27	Thermal stability of bimetallic Au/Fe nanoparticles in silica matrix. , 2014, , .		0
28	Shape elongation of Zn nanoparticles in silica irradiated with swift heavy ions of different species and energies: scaling law and some insights on the elongation mechanism. Nanotechnology, 2014, 25, 435301.	2.6	32
29	Investigating the nanostructured gold thin films using the multifractal analysis. Applied Physics A: Materials Science and Processing, 2014, 117, 2159-2166.	2.3	29
30	Engineering the strain in graphene layers with Au decoration. Applied Surface Science, 2014, 308, 193-198.	6.1	19
31	Tuning of ripple patterns and wetting dynamics of Si (100) surface using ion beam irradiation. Current Applied Physics, 2014, 14, 312-317.	2.4	32
32	Swift heavy-ions induced sputtering in BaF2 thin films. Nuclear Instruments & Methods in Physics Research B, 2013, 314, 21-25.	1.4	15
33	Swift heavy ion irradiation of ZnO nanoparticles embedded in silica: Radiation-induced deoxidation and shape elongation. Applied Physics Letters, 2013, 103, .	3.3	23
34	A study on the formation of Ag nanoparticles on the surface and catcher by ion beam irradiation of Ag thin films. Journal Physics D: Applied Physics, 2012, 45, 445304.	2.8	30
35	Formation of nanodots on GaAs by 50keV Ar+ ion irradiation. Applied Surface Science, 2012, 258, 4148-4151.	6.1	32
36	Creation of self-organized gold nanostructures by keV ion beam irradiation. Radiation Effects and Defects in Solids, 2011, 166, 553-557.	1.2	15

#	ARTICLE	IF	CITATIONS
37	Quasi-aligned gold nanodots on a nanorippled silica surface: experimental and atomistic simulation investigations. Nanotechnology, 2011, 22, 235305.	2.6	15
38	Engineering of hydrophilic and plasmonic properties of Ag thin film by atom beam irradiation. Applied Surface Science, 2011, 258, 1464-1469.	6.1	32
39	Nano Pattern on n-Si (100) Surface by Ion Irradiation. , 2011, , .		0