

# N Madhavan

## List of Publications by Year in descending order

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56  
papers

975  
citations

430874

18  
h-index

477307

29  
g-index

56  
all docs

56  
docs citations

56  
times ranked

441  
citing authors

#	ARTICLE	IF	CITATIONS
1	Heavy ion reaction analyzer (HIRA): a recoil mass separator facility at NSC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1994, 339, 543-549.	1.6	94
2	Channel coupling effects on the fusion excitation functions for $^{28}\text{Si} + ^{90}\text{Zr}$ systems. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 487, 105-110.	2.9	66
3	Isotopic dependence and channel coupling effects in the fusion of $^{16}\text{O} + ^{112,116}\text{Sn}$ and $^{32}\text{S} + ^{112,116,120}\text{Sn}$ systems. Physical Review C, 2001, 65, .	2.9	59
4	Study of transfer channel coupling and entrance channel effects for the near and sub-barrier fusion of $^{16}\text{O} + ^{112,116}\text{Sn}$ and $^{32}\text{S} + ^{112,116,120}\text{Sn}$ systems. Nuclear Physics A, 1996, 603, 176-202.	1.5	54
5	Elastic scattering and fusion cross sections for $^{7}\text{Be} + ^{27}\text{Al}$ systems. Physical Review C, 2006, 73, .	2.9	45
6	Absence of isotopic dependence in the sub-barrier fusion of $^{48}\text{Ti} + ^{58,60,64}\text{Ni}$ systems. Physical Review C, 1996, 53, 803-810.	2.9	44
7	Role of $^{28}\text{Si}$ excitations in the sub-barrier fusion of $^{28}\text{Si} + ^{120}\text{Sn}$ . Physical Review C, 2000, 62, .	2.9	37
8	Spin and excitation energy dependence of fission survival for the $^{19}\text{F} + ^{175}\text{Lu}$ system. Physical Review C, 2000, 62, .	2.9	36
9	Measurement of evaporation residue excitation functions for the $^{19}\text{F} + ^{175}\text{Lu}$ system. Physical Review C, 2000, 62, .	2.9	30
10	Measurement of evaporation residue excitation functions for the $^{19}\text{F} + ^{175}\text{Lu}$ system. Physical Review C, 2000, 62, .	2.9	30
11	Experimental signature of entrance channel effect in heavy mass region via evaporation residue cross section and spin distribution measurements. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2008, 670, 99-102.	4.1	26
12	Multinucleon transfer reactions for the $^{28}\text{Si} + ^{90}\text{Zr}$ system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 487, 105-110.	2.9	25
13	Evaporation residue excitation function and spin distribution for $^{28}\text{Si} + ^{90}\text{Zr}$ system. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 487, 105-110.	2.9	25
14	Relationship between and effect of inelastic excitations and transfer channels on sub-barrier fusion enhancement. Physical Review C, 2017, 96, .	2.9	23
15	Fabrication of $^{184}\text{W}$ target on carbon backing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2008, 590, 79-82.	1.6	21
16	$\hat{1}\pm$ -particle emission as a probe of dynamical deformations. Physical Review C, 1998, 57, 1269-1276.	2.9	20
17	Fabrication of $^{90,94}\text{Zr}$ targets on carbon backing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 613, 190-194.	1.6	20
18	Entrance channel effect on ER spin distribution. Nuclear Physics A, 2012, 890-891, 62-76.	1.5	19

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19	Fusion and quasifission studies in reactions forming Rn via evaporation residue measurements. Physical Review C, 2017, 95, .	2.9	18
20	Band structures in near spherical 138Ce. Nuclear Physics A, 2009, 825, 16-38.	1.5	17
21	Transfer and higher-order phonon coupling effects in the sub-barrier fusion of 28Si and 93Nb. Physical Review C, 1997, 56, 1936-1942.	2.9	16
22	Development of a radioactive ion beam facility using 15 UD tandem accelerator at NSC. Journal of Physics G: Nuclear and Particle Physics, 1998, 24, 1371-1375.	3.6	14
23	Multi-quasiparticle bands in Ce137. Physical Review C, 2008, 78, .	2.9	14
24	One- and two-nucleon transfer in the 28Si+68Zn system at energies below the Coulomb barrier. Physical Review C, 1997, 56, 1902-1908.	2.9	13
25	A large high-energy gamma-ray spectrometer at NSC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1998, 417, 297-310.	1.6	13
26	Sub-barrier fusion in the $^{37}\text{O} + ^{130}\text{Te}$ system. Physical Review C, 2019, 99, .	2.9	13
27	HYRA gas-filled separator coupled to 4 $\pi$ spin spectrometer at IUAC, New Delhi. EPJ Web of Conferences, 2011, 17, 14003.	0.3	12
28	Effect of angular momentum on giant dipole resonance observables in the 28Si+116Cd reaction. Physical Review C, 2013, 88, .	2.9	12
29	Searching the reason for sub-barrier fusion enhancement through multineutron transfer channels. Physical Review C, 2019, 100, .	2.9	12
30	Role of neutron transfer in the sub-barrier fusion cross section in $^{18}\text{O} + ^{130}\text{Te}$ system. Physical Review C, 2019, 99, .	2.9	12
31	Alignments and new band structures in the doubly odd nucleus 80Rb. Nuclear Physics A, 1998, 632, 3-18.	1.5	11
32	Evaporation residue cross section in the $^{37}\text{O} + ^{68}\text{Zn}$ fusion reaction near the Coulomb barrier. Physical Review C, 2020, 102, .	2.9	11
33	Sub-barrier few-nucleon transfer reaction and channel coupling effects in heavy ion fusion. Journal of Physics G: Nuclear and Particle Physics, 1997, 23, 1331-1340.	3.6	9
34	Angular momentum distribution for the formation of evaporation residues in fusion of 19F with 184W near the Coulomb barrier. Nuclear Physics A, 2011, 850, 22-33.	1.5	8
35	Evaporation residue cross-section measurements for $^{48}\text{Ti}$ -induced reactions. Physical Review C, 2017, 96, .	2.9	8
36	A modular focal plane detector system for the heavy ion reaction analyzer at NSC, New Delhi. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 372, 311-317.	1.6	7

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37	Production of light radioactive ion beams (RIB) using inverse kinematics. Nuclear Instruments & Methods in Physics Research B, 2005, 241, 953-958.	1.4	7
38	Spin distributions and cross sections of evaporation residues in the Si28+Yb176 reaction. Physical Review C, 2017, 95, .	2.9	7
39	Identification of $\pi^{\pm}i_2=2$ identical bands in the nuclei $^{78}\text{Kr}$ and $^{80}\text{Rb}$ . Physical Review C, 1997, 56, R2358-R2362.	2.9	6
40	High Spin States in $^{70}\text{Ge}$ [Erratum: APH N.S., Heavy Ion Physics 11 (2000) 189]. Acta Physica Hungarica A Heavy Ion Physics, 2001, 13, 253-258.	0.4	6
41	Study of elastic scattering of mirror nuclei $^7\text{Be} + ^7\text{Li}$ . Nuclear Physics A, 2004, 746, 467-470.	1.5	6
42	Preparation of thin stable erbium target sandwiched between carbon layers. Journal of Radioanalytical and Nuclear Chemistry, 2014, 299, 1129-1131.	1.5	6
43	Evaporation-residue-gated spin distribution measurements of the highly fissile compound nucleus $^{224}\text{Th}$ through $^{224}\text{Ac}$ $\alpha$ decay. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 539, 269-277.	2.9	6
44	Development of a high efficiency annular detector system for RIB experiments at NSC. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 539, 269-277.	1.6	5
45	Investigation of scattering between mirror nuclei $^7\text{Be}$ and $^7\text{Li}$ . Physical Review C, 2005, 72, .	2.9	5
46	Search for stabilizing effects of the $Z=82$ shell closure against fission. Physical Review C, 2019, 99, .	2.9	3
47	Transfer measurements for the Ti+Ni systems at near barrier energies. Pramana - Journal of Physics, 1999, 53, 529-533.	1.8	4
48	Fusion studies in $^{16}\text{O} + ^{142}\text{Nd}$ $\alpha$ decay. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 370, 315-318.	2.9	4
49	Giant Dipole Resonance in $A \sim 144$ mass region. EPJ Web of Conferences, 2013, 63, 01020.	0.3	3
50	Decoupling the effect of temperature on GDR widths in excited compound nucleus $^{144}\text{Sm}$ . Journal of Physics G: Nuclear and Particle Physics, 2014, 41, 115103.	3.6	3
51	Anomalous deviations from statistical evaporation spectra for the decay of the $^{73}\text{Br}$ and $^{77}\text{Rb}$ compound systems. Physical Review C, 2014, 89, .	2.9	3
52	Calibration of analyzing magnet for beam energy measurement using the recoil mass separator HIRA. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 370, 315-318.	1.6	2
53	The present and planned recoil mass spectrometers at Nuclear Science Centre, New Delhi. Physics of Atomic Nuclei, 2003, 66, 1523-1527.	0.4	1
54	Measurements of evaporation residue cross-sections for $^{48}\text{Ti} + ^{140,142}\text{Ce}$ reactions. Nuclear Physics A, 2022, 1019, 122384.	1.5	1

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55	Investigation of isotopic dependence on the O $\rightarrow$ Ni fusion cross section near barrier energies. Physical Review C, 2022, 105, .	2.9	1
56	Channel coupling effects in interactions of $^{19}\text{F}$ with $^{64,68}\text{Zn}$ at energies around the Coulomb barrier. European Physical Journal A, 2022, 58, .	2.5	0