Abdolhamid Minuchehr

List of Publications by Year
in descending order

76 papers	893 citations	471371 17 h-index	552653 26 g-index
76 all docs	76 docs citations	76 times ranked	710 citing authors

#	Article	IF	Citations
1	The thermo-mechanical properties estimation of fullerene-reinforced resin epoxy composites by molecular dynamics simulation â€" A comparative study. Polymer, 2016, 88, 9-18.	1.8	81
2	Synthesis of enhanced phosphonic functional groups mesoporous silica for uranium selective adsorption from aqueous solutions. Scientific Reports, 2017, 7, 11675.	1.6	57
3	Bat algorithm for the fuel arrangement optimization of reactor core. Annals of Nuclear Energy, 2014, 64, 144-151.	0.9	42
4	Continuous firefly algorithm applied to PWR core pattern enhancement. Nuclear Engineering and Design, 2013, 258, 107-115.	0.8	39
5	Multi-objective loading pattern enhancement of PWR based on the Discrete Firefly Algorithm. Annals of Nuclear Energy, 2013, 57, 151-163.	0.9	32
6	Investigation of PWR core optimization using harmony search algorithms. Annals of Nuclear Energy, 2013, 57, 1-15.	0.9	27
7	Coupled neutronic/thermo-hydraulic analysis of water/Al2O3 nanofluids in a VVER-1000 reactor. Annals of Nuclear Energy, 2014, 65, 72-77.	0.9	27
8	Differential harmony search algorithm to optimize PWRs loading pattern. Nuclear Engineering and Design, 2013, 257, 161-174.	0.8	25
9	PWR loading pattern optimization using Harmony Search algorithm. Annals of Nuclear Energy, 2013, 53, 288-298.	0.9	24
10	Economic and Efficient phosphonic functional groups mesoporous silica for uranium selective adsorption from aqueous solutions. Scientific Reports, 2019, 9, 9686.	1.6	24
11	Development of a high order and multi-dimensional nodal code, ACNEC3D, for reactor core analysis. Annals of Nuclear Energy, 2013, 55, 211-224.	0.9	21
12	WWER core pattern enhancement using adaptive improved harmony search. Nuclear Engineering and Design, 2013, 254, 23-32.	0.8	21
13	An adaptive finite element approach for neutron transport equation. Nuclear Engineering and Design, 2011, 241, 2143-2154.	0.8	20
14	Nuclear reactor core optimization with Parallel Integer Coded Genetic Algorithm. Annals of Nuclear Energy, 2013, 60, 308-315.	0.9	20
15	Performance comparison of zeroth order nodal expansion methods in 3D rectangular geometry. Nuclear Engineering and Design, 2012, 252, 248-266.	0.8	19
16	Th(iv) recovery from aqueous waste via hollow fiber renewal liquid membrane (HFRLM) in recycling mode: modelling and experimental validation. RSC Advances, 2017, 7, 7413-7423.	1.7	19
17	Advanced progressive real coded genetic algorithm for nuclear system availability optimization through preventive maintenance scheduling. Annals of Nuclear Energy, 2013, 60, 64-72.	0.9	18
18	Self-adaptive global best harmony search algorithm applied to reactor core fuel management optimization. Annals of Nuclear Energy, 2013, 62, 86-102.	0.9	17

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19	An approach to stability analysis of spatial xenon oscillations in WWER-1000 reactors. Annals of Nuclear Energy, 2015, 79, 125-132.	0.9	16
20	Coupled neutronic thermal–hydraulic transient analysis of accidents in PWRs. Annals of Nuclear Energy, 2012, 50, 158-166.	0.9	15
21	Full scope thermal-neutronic analysis of LOFA in a WWER-1000 reactor core by coupling PARCS v2.7 and COBRA-EN. Progress in Nuclear Energy, 2014, 74, 193-200.	1.3	15
22	Th(IV) transport from nitrate media through hollow fiber renewal liquid membrane. Journal of Membrane Science, 2016, 520, 374-384.	4.1	15
23	Insights into the primary radiation damage of silicon by a machine learning interatomic potential. Materials Research Letters, 2020, 8, 364-372.	4.1	15
24	226Ra concentration in the teeth of habitants of areas with high level of natural radioactivity in Ramsar. Journal of Environmental Radioactivity, 2006, 89, 212-218.	0.9	14
25	Numerical study of fuel–clad mechanical interaction during long-term burnup of WWER1000. Annals of Nuclear Energy, 2015, 80, 267-278.	0.9	13
26	A novel optimization method, Effective Discrete Firefly Algorithm, for fuel reload design of nuclear reactors. Annals of Nuclear Energy, 2015, 81, 263-275.	0.9	13
27	An investigation for an optimized neutron energy-group structure in thermal lattices using Particle Swarm Optimization. Annals of Nuclear Energy, 2012, 47, 53-61.	0.9	12
28	Thorium pertraction through hollow fiber renewal liquid membrane (HFRLM) using Cyanex 272 as carrier. Progress in Nuclear Energy, 2017, 100, 209-220.	1.3	12
29	Mechanical properties of carbon nanotube- and graphene-reinforced Araldite LY/Aradur HY 5052 resin epoxy composites: a molecular dynamics study. Journal of Molecular Modeling, 2019, 25, 191.	0.8	12
30	Short-term and long-term analysis of WWER-1000 containment parameters in a large break LOCA. Progress in Nuclear Energy, 2014, 74, 201-212.	1.3	11
31	Analysis of thermal–hydraulic parameters of WWER-1000 containment in a large break LOCA. Annals of Nuclear Energy, 2014, 68, 101-111.	0.9	11
32	ENTRANS: A platform for finite elements modeling of 3D neutron transport equation, Part II. Multidimensional implementation. Annals of Nuclear Energy, 2017, 101, 534-551.	0.9	11
33	Heterogeneous reactor core transport technique using response matrix and collision probability methods. Annals of Nuclear Energy, 2013, 62, 137-143.	0.9	10
34	An adaptive mesh refinement approach for average current nodal expansion method in 2-D rectangular geometry. Annals of Nuclear Energy, 2013, 55, 61-70.	0.9	10
35	Spatially adaptive hp refinement approach for PN neutron transport equation using spectral element method. Annals of Nuclear Energy, 2015, 85, 1066-1076.	0.9	10
36	Simulation of rod ejection accident in a WWER-1000 Nuclear Reactor by using PARCS code. Annals of Nuclear Energy, 2014, 65, 132-140.	0.9	9

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37	Dehydration of acetonitrile using cross-linked sodium alginate membrane containing nano-sized NaA zeolite. Chemical Papers, 2017, 71, 1143-1153.	1.0	9
38	Evaluation of compressible flow in spherical fueled reactors using the porous media model. Annals of Nuclear Energy, 2013, 57, 185-194.	0.9	8
39	Space independent xenon oscillations control in VVER reactor: A bifurcation analysis approach. Progress in Nuclear Energy, 2016, 88, 19-27.	1.3	8
40	The role of chromium and nickel on the thermal and mechanical properties of FeNiCr austenitic stainless steels under high pressure and temperature: a molecular dynamics study. Molecular Simulation, 2019, 45, 672-684.	0.9	8
41	A NOVEL APPROACH TO FIND OPTIMIZED NEUTRON ENERGY GROUP STRUCTURE IN MOX THERMAL LATTICES USING SWARM INTELLIGENCE. Nuclear Engineering and Technology, 2013, 45, 951-960.	1.1	7
42	Development and validation of a new multigroup Monte Carlo Criticality Calculations (MC3) code. Progress in Nuclear Energy, 2015, 81, 53-59.	1.3	7
43	Three-dimensional high order nodal code, ACNECH, for the neutronic modeling of hexagonal-z geometry. Annals of Nuclear Energy, 2014, 68, 172-182.	0.9	6
44	Transient analysis of break below the grid in Tehran research reactor using the newly enhanced COBRA-EN code. Annals of Nuclear Energy, 2012, 49, 1-11.	0.9	5
45	A PN-based approach along PSO scheme for PWR core reloading patterns optimization. Nuclear Engineering and Design, 2012, 248, 206-215.	0.8	5
46	Coupled hp-adaptivity for average current nodal expansion method in 2-D rectangular geometry. Progress in Nuclear Energy, 2013, 66, 25-34.	1.3	5
47	Analysis of control rod drop accident in PWRs with multipoint kinetics method. Annals of Nuclear Energy, 2016, 88, 194-203.	0.9	5
48	An arbitrary geometry finite element method for the adjoint neutron transport equation. Annals of Nuclear Energy, 2017, 110, 511-525.	0.9	5
49	Laplace transform finite volume modeling of water hammer along fluidâ€"structure interaction. Computers and Mathematics With Applications, 2019, 77, 2821-2832.	1.4	5
50	Synchronized forward-adjoint neutron transport using method of characteristics. Progress in Nuclear Energy, 2016, 92, 211-219.	1.3	4
51	The development of GPU-based parallel PRNG for Monte Carlo applications in CUDA Fortran. AIP Advances, 2016, 6, .	0.6	4
52	A semi-analytical treatment of xenon oscillations. Annals of Nuclear Energy, 2017, 106, 127-135.	0.9	4
53	A coupled neutronic/thermalâ€"hydraulic module for the transient analysis of VVER-1000 reactor during reactivity insertion accidents. Progress in Nuclear Energy, 2020, 121, 103249.	1.3	4
54	FDBACE code for fast Doppler broadening ACE format based on parallel processing. Annals of Nuclear Energy, 2013, 62, 170-177.	0.9	3

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55	An improved convergence rate for the prompt α eigenvalue calculation in α-k iteration methods. Annals of Nuclear Energy, 2018, 118, 15-25.	0.9	3
56	Implementation and comparison of different prompt and delayed α-static approaches. Progress in Nuclear Energy, 2019, 114, 210-226.	1.3	3
57	A pure dynamic Monte Carlo code for the neutronic analysis of nuclear reactors. Annals of Nuclear Energy, 2022, 165, 108627.	0.9	3
58	Primary radiation damage in silicon from the viewpoint of a machine learning interatomic potential. Physical Review Materials, 2021, 5, .	0.9	3
59	An advanced method for determination of loss of coolant accident in nuclear power plants. Nuclear Engineering and Design, 2011, 241, 2013-2019.	0.8	2
60	Impact assessment of upscattering on resonance calculation using improved ultrafine energy group method. Annals of Nuclear Energy, 2012, 49, 114-121.	0.9	2
61	Bayesian inference along Markov Chain Monte Carlo approach for PWR core loading pattern optimization. Annals of Nuclear Energy, 2012, 50, 150-157.	0.9	2
62	An adaptive node refinement for particle transport techniques based on response matrix and collision probability methods. Annals of Nuclear Energy, 2015, 80, 248-253.	0.9	2
63	An improved combinatorial geometry model for arbitrary geometry in DSMC. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 033203.	0.9	2
64	Numerical study of hyperstoichiometric fuel creep (UO2+) in fuel clad interaction of WWER1000. Annals of Nuclear Energy, 2019, 133, 950-959.	0.9	2
65	Modeling and experimental validation of the steady-state counteractive facilitated transport of Th(IV) and hydrogen ions through hollow-fiber renewal liquid membrane. Chemical Papers, 2021, 75, 325-336.	1.0	2
66	An adaptive p-refinement strategy applied to nodal expansion method in 3D Cartesian geometry. Annals of Nuclear Energy, 2014, 63, 575-586.	0.9	1
67	Hybrid space–angle adaptivity for whole-core particle transport calculations. Annals of Nuclear Energy, 2015, 80, 254-260.	0.9	1
68	Resonance self-shielding calculation using subgroup method and ABC algorithm. Progress in Nuclear Energy, 2015, 78, 303-309.	1.3	1
69	Electromagnetism Mechanism for Enhancing the Refueling Cycle Length of a WWER-1000. Nuclear Engineering and Technology, 2017, 49, 43-53.	1.1	1
70	Even-parity Boltzmann transport equation applied for response (contributon) flux calculation based on the spatial channel theory. Computers and Mathematics With Applications, 2018, 75, 4378-4396.	1.4	1
71	A goal-oriented and self-adaptive mesh refinement approach for the even parity neutron transport equation. Progress in Nuclear Energy, 2020, 119, 102996.	1.3	1
72	A mesh-free treatment for even parity neutron transport equation. Annals of Nuclear Energy, 2021, 158, 108292.	0.9	1

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73	DgSMC-B code: A robust and autonomous direct simulation Monte Carlo code for arbitrary geometries. AIP Advances, 2016, 6, 075208.	0.6	1
74	Readout responses of inclined strips in position-sensitive detectors. IEEE Transactions on Nuclear Science, 2001, 48, 2321-2323.	1.2	0
75	Accurate reflective boundary condition in the P method. Annals of Nuclear Energy, 2017, 109, 583-599.	0.9	0
76	A novel adaptive mesh free approach for even- parity neutron transport equation. Annals of Nuclear Energy, 2022, 175, 109253.	0.9	0