Robert Huszank

List of Publications by Year
in descending order

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45 papers	631 citations	623188 14 h-index	676716 22 g-index
46 all docs	46 docs citations	46 times ranked	741 citing authors

#	Article	IF	Citations
1	Improvement in mixing efficiency of microfluidic passive mixers functionalized by microstructures created with proton beam lithography. Chemical Engineering Science, 2022, 247, 117006.	1.9	11
2	Proton beam irradiation induces invisible modifications under the surface of painted parchment. Scientific Reports, 2022, 12, 113.	1.6	6
3	In-air proton beam irradiation induced radiolysis of methyl orange in aqueous solution. Radiation Physics and Chemistry, 2021, 180, 109322.	1.4	7
4	Low-energy Measurement of the ⁹⁶Zr(Î±,n)⁹⁹Mo Reaction Cross Section and Its Impact on Weak r-process Nucleosynthesis. Astrophysical Journal, 2021, 908, 202.	1.6	11
5	Study of the geometry of open channels in a layer-bed-type microfluidic immobilized enzyme reactor. Analytical and Bioanalytical Chemistry, 2021, 413, 6321-6332.	1.9	2
6	Functionalization of microfluidic devices by microstructures created with proton beam lithography. Vacuum, 2021, 190, 110295.	1.6	7
7	Measurement of the ⁹¹Zr(p,Î³)^{92m}Nb cross section motivated by type Ia supernova nucleosynthesis. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 105202.	1.4	5
8	Activation measurement of a-induced cross sections for 197Au: analysis in the statistical model and beyond. Journal of Physics: Conference Series, 2020, 1668, 012042.	0.3	3
9	Adoption and Evaluation of a sample Pretreatment Protocol for Radiocarbon Dating of Cremated Bones at HEKAL. Radiocarbon, 2019, 61, 159-171.	0.8	8
10	Investigation of chemical changes in PMMA induced by 1.6â€¯MeV He+ irradiation by ion beam analytical methods (RBS-ERDA) and infrared spectroscopy (ATR-FTIR). Nuclear Instruments & Methods in Physics Research B, 2019, 450, 364-368.	0.6	23
11	Resonance strengths in the N14 (p,Î³)O15 astrophysical key reaction measured with activation. Physical Review C, 2019, 100, .	1.1	11
12	Towards more reliable AFM force-curve evaluation: A method for spring constant selection, adaptive lever sensitivity calibration and fitting boundary identification. Micron, 2019, 125, 102717.	1.1	6
13	Proton induced differential cross sections on 14N and 28Si from 3 to 4â€¯MeV. Nuclear Instruments & Methods in Physics Research B, 2019, 443, 48-56.	0.6	3
14	Cross section of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -induced reactions on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>Au</mml:mi><mml:mprescripts /><mml:none /><mml:mn>197</mml:mn></mml:mmultiscripts></mml:math> at sub-Coulomb energies. Physical Review C, 2019, 100, .	1.1	12
15	Proton Beam Effects on Geâ€“Se/Ag Thin Films. Physica Status Solidi (B): Basic Research, 2018, 255, 1700453.	0.7	4
16	The Effect of Surface Inclination on AFM Force-Curve Calibration and Evaluation. , 2018, , .		0
17	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -induced reactions on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>In</mml:mi><mml:mprescripts /><mml:none /><mml:mn>115</mml:mn></mml:mmultiscripts></mml:math> : Cross section measurements and statistical model analysis. Physical Review C, 2018, 97, .	1.1	13
18	Wide range control in the elastic properties of PDMS polymer by ion beam (H +) irradiation. Polymer Degradation and Stability, 2018, 152, 253-258.	2.7	12

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19	Direct Trace Element Analysis of Liquid Blood Samples by In-Air Ion Beam Analytical Techniques (PIXEâ€“PIGE). Analytical Chemistry, 2017, 89, 1558-1564.	3.2	14
20	Enhanced growth of tellurium nanowires under conditions of macromolecular crowding. Physical Chemistry Chemical Physics, 2017, 19, 16477-16484.	1.3	7
21	Cross section measurement of the astrophysically important <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mmultiscripts><mml:mi mathvariant="normal">O</mml:mi><mml:mprescripts /><mml:none /><mml:mn>17</mml:mn></mml:mmultiscripts><mml:mo>(</mml:mo><mml:mi>p</mml:mi><mml:mo>,</mml:mo><mml:mi>Î³</mml:mi><mml:mspace width="0.16em" /><mml:mmultiscripts><mml:mi mathvariant="normal">F</mml:mi><mml:mprescripts /><mml:none /><mml:mn>18</mml:mn></mml:mmultiscripts></mml:mrow. Physical Review C, 2017, 95, .	1.1	9
22	Compaction of polydimethylsiloxane due to nitrogen ion irradiation and its application for creating microlens arrays. Thin Solid Films, 2017, 636, 634-638.	0.8	8
23	Tilted pillar array fabrication by the combination of proton beam writing and soft lithography for microfluidic cell capture: Part 1 Design and feasibility. Electrophoresis, 2016, 37, 498-503.	1.3	11
24	Determination of the density of siliconâ€“nitride thin films by ion-beam analytical techniques (RBS, PIXE,) Tj ETQq0 0 0 rgBT /Overlock 1	0.7	20
25	Development of a new in-air micro-PIXE set-up with in-vacuum charge measurements in Atomki. Nuclear Instruments & Methods in Physics Research B, 2015, 362, 167-171.	0.6	12
26	Ion beam analysis of golden threads from Romanian medieval textiles. Nuclear Instruments & Methods in Physics Research B, 2015, 348, 285-290.	0.6	11
27	Proton beam lithography in negative tone liquid phase PDMS polymer resist. Nuclear Instruments & Methods in Physics Research B, 2015, 348, 213-217.	0.6	8
28	Application of PIGE, BS and NRA techniques to oxygen profiling in steel joints using deuteron beam. Nuclear Instruments & Methods in Physics Research B, 2015, 348, 165-169.	0.6	8
29	Direct formation of high aspect ratio multiple tilted micropillar array in liquid phase PDMS by proton beam writing. European Polymer Journal, 2015, 69, 396-402.	2.6	3
30	Ion-Energy Dependency in Proton Irradiation Induced Chemical Processes of Poly(dimethylsiloxane). Journal of Physical Chemistry C, 2013, 117, 25884-25889.	1.5	21
31	⁴He⁺ Ion Beam Irradiation Induced Modification of Poly(dimethylsiloxane). Characterization by Infrared Spectroscopy and Ion Beam Analytical Techniques. Langmuir, 2011, 27, 3842-3848.	1.6	32
32	Chemical changes in PMMA as a function of depth due to proton beam irradiation. Materials Chemistry and Physics, 2011, 130, 702-707.	2.0	41
33	Refractive index depth profile and its relaxation in polydimethylsiloxane (PDMS) due to proton irradiation. Materials Chemistry and Physics, 2011, 131, 370-374.	2.0	9
34	Compaction of poly(dimethylsiloxane) (PDMS) due to proton beam irradiation. Applied Surface Science, 2011, 257, 4612-4615.	3.1	17
35	Fabrication of optical devices in poly(dimethylsiloxane) by proton microbeam. Optics Communications, 2010, 283, 176-180.	1.0	25
36	Investigation of hydrogen depletion of organic materials upon ion beam irradiation by simultaneous micro-RBS and micro-ERDA techniques. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 2197-2201.	0.6	11

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37	PDMS patterning by proton beam. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2296-2298.	0.6	18
38	Micro-ERDA, micro-RBS and micro-PIXE techniques in the investigation of fish otoliths. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2132-2135.	0.6	15
39	Fabrication of a microreactor by proton beam writing technique. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2299-2301.	0.6	6
40	Study of individual atmospheric aerosol particles at the Debrecen ion microprobe. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2236-2240.	0.6	19
41	Investigation of an ion-milled Si/Cr multilayer using micro-RBS, ellipsometry and AES depth profiling techniques. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 2212-2215.	0.6	5
42	Air-stable, heme-like water-soluble iron(II) porphyrin: in situ preparation and characterization. Journal of Biological Inorganic Chemistry, 2007, 12, 681-690.	1.1	24
43	Photophysics and photochemistry of kinetically labile, water-soluble porphyrin complexes. Coordination Chemistry Reviews, 2006, 250, 1792-1803.	9.5	66
44	A heme-like, water-soluble iron(ii) porphyrin: thermal and photoinduced properties, evidence for sitting-atop structure. Chemical Communications, 2005, , 224-226.	2.2	29
45	Degradation of surfactants by hydroxyl radicals photogenerated from hydroxoiron(iii) complexes. Photochemical and Photobiological Sciences, 2003, 2, 960-966.	1.6	34