Amgad R Rezk

List of Publications by Year
in descending order

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Version: 2024-02-01

		236925	302126
53	1,631	25	39
papers	citations	h-index	g-index

57	57	57	1806
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Uniform mixing in paper-based microfluidic systems using surface acoustic waves. Lab on A Chip, 2012, 12, 773-779.	6.0	153
2	Ultrafast, One-Step, Salt-Solution-Based Acoustic Synthesis of Ti₃C₂ MXene. ACS Nano, 2021, 15, 4287-4293.	14.6	103
3	Acoustically-Driven Trion and Exciton Modulation in Piezoelectric Two-Dimensional MoS₂. Nano Letters, 2016, 16, 849-855.	9.1	91
4	Unique fingering instabilities and soliton-like wave propagation in thin acoustowetting films. Nature Communications, 2012, 3, 1167.	12.8	86
5	Highly Ordered Arrays of Femtoliter Surface Droplets. Small, 2015, 11, 4850-4855.	10.0	64
6	HYbriD Resonant Acoustics (HYDRA). Advanced Materials, 2016, 28, 1970-1975.	21.0	63
7	Acoustically-mediated intracellular delivery. Nanoscale, 2018, 10, 13165-13178.	5.6	59
8	Rapid Enhancement of Cellular Spheroid Assembly by Acoustically Driven Microcentrifugation. ACS Biomaterials Science and Engineering, 2016, 2, 1013-1022.	5.2	58
9	Continuous tuneable droplet ejection via pulsed surface acoustic wave jetting. Soft Matter, 2018, 14, 5721-5727.	2.7	52
10	Acoustomicrofluidic Synthesis of Pristine Ultrathin Ti₃C₂T_z MXene Nanosheets and Quantum Dots. ACS Nano, 2021, 15, 12099-12108.	14.6	46
11	Toward Complete Miniaturisation of Flow Injection Analysis Systems: Microfluidic Enhancement of Chemiluminescent Detection. Analytical Chemistry, 2014, 86, 10812-10819.	6.5	41
12	Dynamics of liquid films exposed to high-frequency surface vibration. Physical Review E, 2015, 91, 053015.	2.1	41
13	Microscale anechoic architecture: acoustic diffusers for ultra low power microparticle separation via traveling surface acoustic waves. Lab on A Chip, 2015, 15, 43-46.	6.0	41
14	Acousticâ€“Excitonic Coupling for Dynamic Photoluminescence Manipulation of Quasiâ€‹2D MoS₂ Nanoflakes. Advanced Optical Materials, 2015, 3, 888-894.	7.3	39
15	Assessment of the potential of a high frequency acoustomicrofluidic nebulisation platform for inhaled stem cell therapy. Integrative Biology (United Kingdom), 2016, 8, 12-20.	1.3	37
16	Submicron Particle and Cell Concentration in a Closed Chamber Surface Acoustic Wave Microcentrifuge. Analytical Chemistry, 2020, 92, 10024-10032.	6.5	37
17	High Frequency Sonoprocessing: A New Field of Cavitationâ€Free Acoustic Materials Synthesis, Processing, and Manipulation. Advanced Science, 2021, 8, 2001983.	11.2	37
18	Double flow reversal in thin liquid films driven by megahertz-order surface vibration. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20130765.	2.1	35

#	Article	IF	Citations
19	Simple, low cost MHz-order acoustomicrofluidics using aluminium foil electrodes. Lab on A Chip, 2014, 14, 1802-1805.	6.0	35
20	Poloidal Flow and Toroidal Particle Ring Formation in a Sessile Drop Driven by Megahertz Order Vibration. Langmuir, 2014, 30, 11243-11247.	3.5	33
21	Acoustomicrofluidic assembly of oriented and simultaneously activated metalâ€“organic frameworks. Nature Communications, 2019, 10, 2282.	12.8	33
22	Ultrafast Acoustofluidic Exfoliation of Stratified Crystals. Advanced Materials, 2018, 30, e1704756.	21.0	32
23	Liquid Phase Acoustic Wave Exfoliation of Layered MoS₂: Critical Impact of Electric Field in Efficiency. Chemistry of Materials, 2018, 30, 5593-5601.	6.7	31
24	Onâ€Chip Generation of Vortical Flows for Microfluidic Centrifugation. Small, 2020, 16, e1903605.	10.0	30
25	Acoustically-driven thread-based tuneable gradient generators. Lab on A Chip, 2016, 16, 2820-2828.	6.0	28
26	Stability and efficacy of synthetic cationic antimicrobial peptides nebulized using high frequency acoustic waves. Biomicrofluidics, 2016, 10, 034115.	2.4	24
27	Acoustotemplating: rapid synthesis of freestanding quasi-2D MOF/graphene oxide heterostructures for supercapacitor applications. Journal of Materials Chemistry A, 2022, 10, 7058-7072.	10.3	24
28	Free Radical Generation from High-Frequency Electromechanical Dissociation of Pure Water. Journal of Physical Chemistry Letters, 2020, 11, 4655-4661.	4.6	23
29	Acoustofection: High-Frequency Vibrational Membrane Permeabilization for Intracellular siRNA Delivery into Nonadherent Cells. ACS Applied Bio Materials, 2021, 4, 2781-2789.	4.6	23
30	Continuous Production of Janus and Composite Liquid Marbles with Tunable Coverage. ACS Applied Materials & Interfaces, 2016, 8, 17751-17756.	8.0	22
31	Plug-and-actuate on demand: multimodal individual addressability of microarray plates using modular hybrid acoustic wave technology. Lab on A Chip, 2018, 18, 406-411.	6.0	22
32	Increasing Exfoliation Yield in the Synthesis of MoS2 Quantum Dots for Optoelectronic and Other Applications through a Continuous Multicycle Acoustomicrofluidic Approach. ACS Applied Nano Materials, 2018, 1, 2503-2508.	5.0	19
33	High frequency acoustic permeabilisation of drugs through tissue for localised mucosal delivery. Lab on A Chip, 2018, 18, 3272-3284.	6.0	17
34	Acoustopipetting: Tunable Nanoliter Sample Dispensing Using Surface Acoustic Waves. Analytical Chemistry, 2019, 91, 5621-5628.	6.5	17
35	Ultrafast assembly of swordlike Cu₃(1,3,5-benzenetricarboxylate)_n metalâ€“organic framework crystals with exposed active metal sites. Nanoscale Horizons, 2020, 5, 1050-1057.	8.0	16
36	Programmable Phototaxis of Metalâ€“Phenolic Particle Microswimmers. Advanced Materials, 2021, 33, e2006177.	21.0	16

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37	Fast three-dimensional micropatterning of PC12 cells in rapidly crosslinked hydrogel scaffolds using ultrasonic standing waves. Biofabrication, 2020, 12, 015013.	7.1	15
38	Acoustomicrofluidic Concentration and Signal Enhancement of Fluorescent Nanodiamond Sensors. Analytical Chemistry, 2021, 93, 16133-16141.	6.5	12
39	Enhanced Antimicrobial Activity and Low Phytotoxicity of Acoustically Synthesized Large Aspect Ratio Cu-BTC Metalâ€“Organic Frameworks with Exposed Metal Sites. ACS Applied Materials & Interfaces, 2021, 13, 58309-58318.	8.0	11
40	Dissolution dynamics of a suspension droplet in a binary solution for controlled nanoparticle assembly. Nanoscale, 2017, 9, 13441-13448.	5.6	10
41	Hybrid Surface and Bulk Resonant Acoustics for Concurrent Actuation and Sensing on a Single Microfluidic Device. Analytical Chemistry, 2018, 90, 5335-5342.	6.5	9
42	Acoustic cavitation at low gas pressures in PZT-based ultrasonic systems. Ultrasonics Sonochemistry, 2021, 73, 105493.	8.2	9
43	UV Direct Write Metal Enhanced Redox (MER) Domain Engineering for Realization of Surface Acoustic Devices on Lithium Niobate. Advanced Materials Interfaces, 2014, 1, 1400006.	3.7	8
44	Miniaturised acoustofluidic tactile haptic actuator. Soft Matter, 2019, 15, 4146-4152.	2.7	8
45	Phononâ€polariton entrapment in homogenous surface phonon cavities. Annalen Der Physik, 2016, 528, 365-372.	2.4	7
46	Rapid dry exfoliation method for tuneable production of molybdenum disulphide quantum dots and large micron-dimension sheets. Nanoscale, 2019, 11, 11626-11633.	5.6	5
47	Subwavelength confinement of propagating surface acoustic waves. Applied Physics Letters, 2021, 118, .	3.3	5
48	Optimising Aerosol Delivery for Maxillary Sinus Deposition in a Post-FESS Sinonasal Cavities. Aerosol and Air Quality Research, 2021, 21, 210098.	2.1	3
49	Microfluidics: HYbriD Resonant Acoustics (HYDRA) (Adv. Mater. 10/2016). Advanced Materials, 2016, 28, 2088-2088.	21.0	1
50	Impact of domain depth on SAW generation by acoustic superlattice transducer in 128° YX-cut lithium niobate. , 2013, , .		0
51	Ultraviolet direct domain writing on 128° YX-cut LiNbO<inf>3</inf>: For SAW applications. , 2013, , .		0
52	Surface Acoustic Devices: UV Direct Write Metal Enhanced Redox (MER) Domain Engineering for Realization of Surface Acoustic Devices on Lithium Niobate (Adv. Mater. Interfaces 4/2014). Advanced Materials Interfaces, 2014, 1, .	3.7	0
53	Phonon-Mediated Synthesis, Processing and Manipulation of Two-Dimensional Materials. , 0, , .		0