Toru Tuziuti

List of Publications by Year
in descending order

116	4,700	41	65
papers	citations	h-index	g-index

71102 106344

117	117	117	2773
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Control of viscosity in starch and polysaccharide solutions with ultrasound after gelatinization. Innovative Food Science and Emerging Technologies, 2008, 9, 140-146.	5.6	241
2	Correlation between Acoustic Cavitation Noise and Yield Enhancement of Sonochemical Reaction by Particle Addition. Journal of Physical Chemistry A, 2005, 109, 4869-4872.	2.5	190
3	The range of ambient radius for an active bubble in sonoluminescence and sonochemical reactions. Journal of Chemical Physics, 2008, 128, 184705.	3.0	158
4	Theoretical study of single-bubble sonochemistry. Journal of Chemical Physics, 2005, 122, 224706.	3.0	148
5	Sonochemistry and its dosimetry. Microchemical Journal, 2005, 80, 159-164.	4.5	147
6	Mysteries of bulk nanobubbles (ultrafine bubbles); stability and radical formation. Ultrasonics Sonochemistry, 2018, 48, 259-266.	8.2	142
7	Strongly interacting bubbles under an ultrasonic horn. Physical Review E, 2008, 77, 016609.	2.1	141
8	Numerical simulations of acoustic cavitation noise with the temporal fluctuation in the number of bubbles. Ultrasonics Sonochemistry, 2010, 17, 460-472.	8.2	118
9	Dynamic Equilibrium Model for a Bulk Nanobubble and a Microbubble Partly Covered with Hydrophobic Material. Langmuir, 2016, 32, 11101-11110.	3.5	111
10	Relationship between the bubble temperature and main oxidant created inside an air bubble under ultrasound. Journal of Chemical Physics, 2007, 127, 154502.	3.0	104
11	Fabrication of Zinc Ferrite Nanocrystals by Sonochemical Emulsification and Evaporation:Â Observation of Magnetization and Its Relaxation at Low Temperature. Journal of Physical Chemistry B, 2006, 110, 15234-15243.	2.6	102
12	Influence of bubble clustering on multibubble sonoluminescence. Ultrasonics, 2002, 40, 655-660.	3.9	98
13	Theoretical study of the ambient-pressure dependence of sonochemical reactions. Journal of Chemical Physics, 2003, 119, 346-356.	3.0	98
14	Noncontact Acoustic Manipulation in Air. Japanese Journal of Applied Physics, 2007, 46, 4948.	1.5	89
15	Spatial Distribution of Acoustic Cavitation Bubbles at Different Ultrasound Frequencies. ChemPhysChem, 2010, 11, 1680-1684.	2.1	86
16	Sonoluminescence. Applied Spectroscopy Reviews, 2004, 39, 399-436.	6.7	78
17	FEM calculation of an acoustic field in a sonochemical reactor. Ultrasonics Sonochemistry, 2007, 14, 605-614.	8.2	77
18	Enhancement of sonochemical reaction of terephthalate ion by superposition of ultrasonic fields of various frequencies. Ultrasonics Sonochemistry, 2007, 14, 699-704.	8.2	75

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19	Influence of the bubble-bubble interaction on destruction of encapsulated microbubbles under ultrasound. Journal of the Acoustical Society of America, 2009, 126, 973-982.	1.1	75
20	The detection and control of stable and transient acoustic cavitation bubbles. Physical Chemistry Chemical Physics, 2009, 11, 10118.	2.8	74
21	Effect of particle addition on sonochemical reaction. Ultrasonics, 2004, 42, 597-601.	3.9	72
22	Spatial Distribution Enhancement of Sonoluminescence Activity by Altering Sonication and Solution Conditions. Journal of Physical Chemistry B, 2008, 112, 15333-15341.	2.6	71
23	Optimum bubble temperature for the sonochemical production of oxidants. Ultrasonics, 2004, 42, 579-584.	3.9	69
24	Acoustic Standing-Wave Field for Manipulation in Air. Japanese Journal of Applied Physics, 2008, 47, 4336.	1.5	68
25	Dependence of the characteristics of bubbles on types of sonochemical reactors. Ultrasonics Sonochemistry, 2005, 12, 43-51.	8.2	67
26	Effect of static pressure on acoustic energy radiated by cavitation bubbles in viscous liquids under ultrasound. Journal of the Acoustical Society of America, 2011, 130, 3233-3242.	1.1	65
27	Development and optimization of acoustic bubble structures at high frequencies. Ultrasonics Sonochemistry, 2011, 18, 92-98.	8.2	65
28	A new ultrasonic cavitation approach for the synthesis of zinc ferrite nanocrystals. Current Applied Physics, 2006, 6, 591-593.	2.4	64
29	Quenching Mechanism of Multibubble Sonoluminescence at Excessive Sound Pressure. Japanese Journal of Applied Physics, 2001, 40, 3856-3860.	1.5	62
30	Mechanism of Enhancement of Sonochemical-Reaction Efficiency by Pulsed Ultrasound. Journal of Physical Chemistry A, 2008, 112, 4875-4878.	2.5	62
31	Protein release from yeast cells as an evaluation method of physical effects in ultrasonic field. Ultrasonics Sonochemistry, 2008, 15, 995-1000.	8.2	60
32	Correlation between Na* Emission and â€œChemically Activeâ€•Acoustic Cavitation Bubbles. ChemPhysChem, 2007, 8, 2331-2335.	2.1	59
33	Extreme conditions in a dissolving air nanobubble. Physical Review E, 2016, 94, 013106.	2.1	57
34	Sonochemically enhanced adsorption and degradation of methyl orange with activated aluminas. Ultrasonics, 2004, 42, 635-639.	3.9	56
35	Bubble population phenomena in sonochemical reactor: I Estimation of bubble size distribution and its number density with pulsed sonication â€“ Laser diffraction method. Ultrasonics Sonochemistry, 2010, 17, 473-479.	8.2	55
36	Difference in Threshold between Sono- and Sonochemical Luminescence. Japanese Journal of Applied Physics, 2000, 39, 2962-2966.	1.5	54

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37	Sonoluminescence and sonochemiluminescence from a microreactor. Ultrasonics Sonochemistry, 2012, 19, 1252-1259.	8.2	53
38	Control of a Standing Wave Field Using a Line-Focused Transducer for Two-Dimensional Manipulation of Particles. Japanese Journal of Applied Physics, 1998, 37, 2974-2978.	1.5	48
39	Ultrasonic cavitation in microspace. Chemical Communications, 2004, , 2280.	4.1	47
40	Bubble population phenomena in sonochemical reactor: II. Estimation of bubble size distribution and its number density by simple coalescence model calculation. Ultrasonics Sonochemistry, 2010, 17, 480-486.	8.2	44
41	Influence of Surface-Active Solutes on the Coalescence, Clustering, and Fragmentation of Acoustic Bubbles Confined in a Microspace. Journal of Physical Chemistry C, 2007, 111, 19015-19023.	3.1	42
42	Advanced dynamic-equilibrium model for a nanobubble and a micropancake on a hydrophobic or hydrophilic surface. Physical Review E, 2015, 91, 033008.	2.1	41
43	Influence of addition of degassed water on bulk nanobubbles. Ultrasonics Sonochemistry, 2018, 43, 272-274.	8.2	38
44	Influence of increase in static pressure on bulk nanobubbles. Ultrasonics Sonochemistry, 2017, 38, 347-350.	8.2	37
45	Effect of ambient-pressure reduction on multibubble sonochemiluminescence. Journal of Chemical Physics, 2002, 116, 6221-6227.	3.0	35
46	Spatial study on a multibubble system for sonochemistry by laser-light scattering. Ultrasonics Sonochemistry, 2005, 12, 73-77.	8.2	35
47	Bubble motions confined in a microspace observed with stroboscopic technique. Ultrasonics Sonochemistry, 2007, 14, 621-626.	8.2	35
48	Ultrasonic cavitation induced water in vegetable oil emulsion droplets â€“ A simple and easy technique to synthesize manganese zinc ferrite nanocrystals with improved magnetization. Ultrasonics Sonochemistry, 2012, 19, 652-658.	8.2	34
49	High temperature and pressure inside a dissolving oxygen nanobubble. Ultrasonics Sonochemistry, 2019, 55, 308-312.	8.2	32
50	Mechanism of OH radical production from ozone bubbles in water after stopping cavitation. Ultrasonics Sonochemistry, 2019, 58, 104707.	8.2	31
51	Is surface tension reduced by nanobubbles (ultrafine bubbles) generated by cavitation?. Ultrasonics Sonochemistry, 2019, 52, 13-18.	8.2	31
52	Effects of Nonlinearity in Development of Acoustic Streaming. Japanese Journal of Applied Physics, 1995, 34, 2584-2589.	1.5	30
53	Dependence of sonochemical parameters on the platinization of rutile titania â€“ An observation of a pronounced increase in photocatalytic efficiencies. Ultrasonics Sonochemistry, 2010, 17, 621-627.	8.2	30
54	Effect of dual frequency on sonochemical reaction rates. Research on Chemical Intermediates, 2004, 30, 703-711.	2.7	28

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55	Influence of dissolved-air concentration on spatial distribution of bubbles for sonochemistry. Ultrasonics, 2006, 44, e357-e361.	3.9	26
56	Numerical simulations of sonochemical production of BaTiO3 nanoparticles. Ultrasonics Sonochemistry, 2011, 18, 1211-1217.	8.2	26
57	Suppression of Sonochemiluminescence Reduction at High Acoustic Amplitudes by the Addition of Particles. Journal of Physical Chemistry A, 2007, 111, 12093-12098.	2.5	25
58	Synthesis of europium-doped yttrium hydroxide and yttrium oxide nanosheets. Journal of Materials Science, 2008, 43, 1214-1219.	3.7	25
59	Influence of sonication conditions on the efficiency of ultrasonic cleaning with flowing micrometer-sized air bubbles. Ultrasonics Sonochemistry, 2016, 29, 604-611.	8.2	25
60	The influence of storage conditions and container materials on the long term stability of bulk nanobubbles â€" Consideration from a perspective of interactions between bubbles and surroundings. Chemical Engineering Science, 2020, 219, 115594.	3.8	25
61	Relationship between a Standing-Wave Field and a Sonoluminescing Field. Japanese Journal of Applied Physics, 1999, 38, 3053-3057.	1.5	24
62	Measurement and Numerical Calculation of Force on a Particle in a Strong Acoustic Field Required for Levitation. Japanese Journal of Applied Physics, 2009, 48, 07GM09.	1.5	24
63	Laser-Light Scattering from a Multibubble System for Sonochemistry. Journal of Physical Chemistry A, 2004, 108, 9011-9013.	2.5	22
64	Study of an Acoustic Field in a Microchannel. Japanese Journal of Applied Physics, 2010, 49, 07HE14.	1.5	22
65	Simultaneous Observation of Motion and Size of a Sonoluminescing Bubble. Japanese Journal of Applied Physics, 2002, 41, 3248-3249.	1.5	20
66	Observation of a Sonoluminescing Bubble Using a Stroboscope. Japanese Journal of Applied Physics, 2000, 39, 2967-2968.	1.5	19
67	Ultrasonic Cavitational Activation: A Simple and Feasible Route for the Direct Conversion of Zinc Acetate to Highly Monodispersed ZnO. Chemistry Letters, 2006, 35, 60-61.	1.3	19
68	Enhancement of Sonochemical Reaction Rate by Addition of Micrometer-Sized Air Bubbles. Journal of Physical Chemistry A, 2006, 110, 10720-10724.	2.5	18
69	Ultrasound-induced cytolysis of cancer cells is enhanced in the presence of micron-sized alumina particles. Ultrasonics Sonochemistry, 2008, 15, 881-890.	8.2	18
70	Fabrication of nanosized Pt on rutile TiO2 using a standing wave sonochemical reactor (SWSR) â€" observation of an enhanced catalytic oxidation of CO. Ultrasonics Sonochemistry, 2010, 17, 213-218.	8.2	18
71	Manipulation of Particles in a Microchannel with Various Geometric Spaces Using Ultrasound. Japanese Journal of Applied Physics, 2011, 50, 07HE27.	1.5	17
72	Acoustic micromanipulation using a multi-electrode transducer. , 0, , .		16

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73	Measurement of Distribution of Acoustic Radiation Force Perpendicular to Sound Beam Axis. Japanese Journal of Applied Physics, 1999, 38, 3297-3301.	1.5	16
74	Influence of dissolved oxygen content on multibubble sonoluminescence with ambient-pressure reduction. Ultrasonics, 2002, 40, 651-654.	3.9	16
75	Non-contact micromanipulation using an ultrasonic standing wave field. , 0, , .		14
76	Correlation in spatial intensity distribution between volumetric bubble oscillations and sonochemiluminescence in a multibubble system. Research on Chemical Intermediates, 2004, 30, 755-762.	2.7	14
77	Dependence of sonoluminescence intensity on the geometrical configuration of a reactor cell. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2001, 48, 28-36.	3.0	13
78	Ultrasound induced formation of paraffin emulsion droplets as template for the preparation of porous zirconia. Ultrasonics Sonochemistry, 2007, 14, 705-710.	8.2	13
79	Influence of Liquid-Surface Vibration on Sonochemiluminescence Intensity. Journal of Physical Chemistry A, 2010, 114, 7321-7325.	2.5	13
80	Measurement of the establishment process of acoustic streaming using laser Doppler velocimetry. Ultrasonics, 1996, 34, 527-530.	3.9	12
81	Generation and consumption rates of OH radicals in sonochemical reactions. Research on Chemical Intermediates, 2004, 30, 713-721.	2.7	12
82	Variations in the size distribution of bulk nanobubbles in response to static pressure increases. Japanese Journal of Applied Physics, 2020, 59, SKKD03.	1.5	12
83	Variations in the Spatial Distribution of Sonoluminescing Bubbles in the Presence of an Ionic Surfactant and Electrolyte. Journal of Physical Chemistry B, 2010, 114, 2572-2577.	2.6	11
84	Micromanipulation using a focused ultrasonic standing wave field. Electronics and Communications in Japan, Part III: Fundamental Electronic Science (English Translation of Denshi Tsushin Gakkai) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 29	0.1	10
85	Influence of Degree of Gas Saturation on Multibubble Sonoluminescence Intensity. Journal of Physical Chemistry A, 2011, 115, 5089-5093.	2.5	10
86	Interaction of Bulk Nanobubbles (Ultrafine Bubbles) with a Solid Surface. Langmuir, 2021, 37, 1674-1681.	3.5	10
87	Optical cavitation probe using light scattering from bubble clouds. Ultrasonics Sonochemistry, 2009, 16, 519-524.	8.2	9
88	Measurement of the change in the number of ultrafine bubbles through pressurization. Proceedings of SPIE, 2014, , .	0.8	9
89	Acoustic manipulation of micro objects using an ultrasonic standing wave. , 0, , .		8
90	Influence of the Sound Field on the Intensity of Sonoluminescence. Japanese Journal of Applied Physics, 1998, 37, 2832-2835.	1.5	7

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91	Three-dimensional acoustic micromanipulation using four ultrasonic transducers. , 0, , .		7
92	Preparation of nanosized TiO2 supported on activated alumina by a sonochemical method: observation of an increased photocatalytic decolourisation efficiency. Research on Chemical Intermediates, 2004, 30, 785-792.	2.7	7
93	Experimental investigation on the ultrasonic impregnation of wood through measurements of the intensity of sonoluminescence. Ultrasonics Sonochemistry, 2022, 88, 106084.	8.2	7
94	Two-dimensional acoustic micromanipulation using a line-focused transducer. , 0, , .		5
95	Observation of spatial nonuniformity in a sonochemical reaction field. AIP Conference Proceedings, 2000, , .	0.4	5
96	Two-Dimensional Patterning of Inorganic Particles in Resin Using Ultrasound-Induced Plate Vibration. Japanese Journal of Applied Physics, 2011, 50, 088006.	1.5	5
97	Influence of bulk nanobubble concentration on the intensity of sonoluminescence. Ultrasonics Sonochemistry, 2021, 76, 105646.	8.2	5
98	Manipulation of Particles in a Microchannel with Various Geometric Spaces Using Ultrasound. Japanese Journal of Applied Physics, 2011, 50, 07HE27.	1.5	5
99	Two-dimensional acoustic micromanipulation using three ultrasonic transducers. , 0, , .		4
100	Influence of Degree of Gas Saturation on Sonochemiluminescence Intensity Resulting from Microfluidic Reactions. Journal of Physical Chemistry A, 2013, 117, 10598-10603.	2.5	4
101	Synthesis of Alumina Macroporous Materials Using Yeast Cells as Bio-Templates. Journal of the Ceramic Society of Japan, 2005, 113, 696-699.	1.3	3
102	Influence of Surface Active Solute on Ultrasonic Waveform Distortion in Liquid Containing Air Bubbles. Journal of Physical Chemistry A, 2009, 113, 8893-8900.	2.5	3
103	Fabrication of silver nanoparticles deposited on boehmite sol for surface enhanced Raman scattering. Applied Surface Science, 2011, 257, 6010-6015.	6.1	3
104	Two-Dimensional Patterning of Inorganic Particles in Resin Using Ultrasound-Induced Plate Vibration. Japanese Journal of Applied Physics, 2011, 50, 088006.	1.5	3
105	Enhancement of sonochemical reaction by particle addition. AIP Conference Proceedings, 2005, , .	0.4	2
106	Intermittent Changes in the Number of Pulsating Bubbles under Ultrasound. Japanese Journal of Applied Physics, 2012, 51, 028007.	1.5	2
107	Measurement of speed of sound in poly(lactic acid)-clay composite. Ultrasonics, 2014, 54, 1010-1014.	3.9	2
108	Effects of Sonication Conditions on Ultrasonic Dispersion of Inorganic Particles in Acrylic Resin. Japanese Journal of Applied Physics, 2011, 50, 078004.	1.5	1

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109	Ultrasonic Cavitation: A Solution to Nano and Biomaterials. AIP Conference Proceedings, 2005, , .	0.4	0
110	Acoustic Manipulation in Air Using a Standing Wave Field. AIP Conference Proceedings, 2008, , .	0.4	0
111	The Bubble-Bubble Interaction Under An Ultrasonic Horn. AIP Conference Proceedings, 2008, , .	0.4	0
112	Generation and aggregation of BaTiO[sub 3] nanoparticles under ultrasound. , 2012, , .		0
113	On the two-dimensional patterning of inorganic particles in resin using ultrasound. , 2012, , .		0
114	Mist Separation and Sonochemiluminescence under Pulsed Ultrasound. Journal of Physical Chemistry A, 2012, 116, 3593-3597.	2.5	0
115	Effects of Sonication Conditions on Ultrasonic Dispersion of Inorganic Particles in Acrylic Resin. Japanese Journal of Applied Physics, 2011, 50, 078004.	1.5	0
116	Intermittent Changes in the Number of Pulsating Bubbles under Ultrasound. Japanese Journal of Applied Physics, 2012, 51, 028007.	1.5	0