

Agata A Exner

List of Publications by Year in descending order

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129
papers

3,426
citations

136885

32
h-index

168321

53
g-index

139
all docs

139
docs citations

139
times ranked

3654
citing authors

#	ARTICLE	IF	CITATIONS
1	Agarose gel stiffness determines rate of DRG neurite extension in 3D cultures. <i>Biomaterials</i> , 2001, 22, 1077-1084.	5.7	470
2	Formulation and Characterization of Echogenic Lipid-Pluronic Nanobubbles. <i>Molecular Pharmaceutics</i> , 2010, 7, 49-59.	2.3	117
3	Acoustic Characterization and Pharmacokinetic Analyses of New Nanobubble Ultrasound Contrast Agents. <i>Ultrasound in Medicine and Biology</i> , 2013, 39, 2137-2146.	0.7	117
4	Ultrasound molecular imaging of ovarian cancer with CA-125 targeted nanobubble contrast agents. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2017, 13, 2159-2168.	1.7	102
5	Effect of injection site on in situ implant formation and drug release in vivo. <i>Journal of Controlled Release</i> , 2010, 147, 350-358.	4.8	92
6	Contrast enhanced ultrasound imaging by nature-inspired ultrastable echogenic nanobubbles. <i>Nanoscale</i> , 2019, 11, 15647-15658.	2.8	86
7	Ultrasound imaging beyond the vasculature with new generation contrast agents. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2015, 7, 593-608.	3.3	79
8	Improving performance of nanoscale ultrasound contrast agents using N,N-diethylacrylamide stabilization. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2017, 13, 59-67.	1.7	79
9	Enhancement of carboplatin toxicity by Pluronic block copolymers. <i>Journal of Controlled Release</i> , 2005, 106, 188-197.	4.8	77
10	Characterization of different bubble formulations for blood-brain barrier opening using a focused ultrasound system with acoustic feedback control. <i>Scientific Reports</i> , 2018, 8, 7986.	1.6	71
11	Ultrasound Contrast Agents and Delivery Systems in Cancer Detection and Therapy. <i>Advances in Cancer Research</i> , 2018, 139, 57-84.	1.9	67
12	Noninvasive characterization of in situ forming implants using diagnostic ultrasound. <i>Journal of Controlled Release</i> , 2010, 143, 183-190.	4.8	65
13	Sink or float? Characterization of shell-stabilized bulk nanobubbles using a resonant mass measurement technique. <i>Nanoscale</i> , 2019, 11, 851-855.	2.8	62
14	PMMA-Fe ₃ O ₄ for internal mechanical support and magnetic thermal ablation of bone tumors. <i>Theranostics</i> , 2019, 9, 4192-4207.	4.6	62
15	Time-intensity-curve Analysis and Tumor Extravasation of Nanobubble Ultrasound Contrast Agents. <i>Ultrasound in Medicine and Biology</i> , 2019, 45, 2502-2514.	0.7	60
16	Multimodal In Vivo Imaging Exposes the Voyage of Nanoparticles in Tumor Microcirculation. <i>ACS Nano</i> , 2013, 7, 3118-3129.	7.3	59
17	Drug-eluting polymer implants in cancer therapy. <i>Expert Opinion on Drug Delivery</i> , 2008, 5, 775-788.	2.4	52
18	Nanobubble Ultrasound Contrast Agents for Enhanced Delivery of Thermal Sensitizer to Tumors Undergoing Radiofrequency Ablation. <i>Pharmaceutical Research</i> , 2014, 31, 1407-1417.	1.7	52

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19	Cryo-EM Visualization of Lipid and Polymer-Stabilized Perfluorocarbon Gas Nanobubbles - A Step Towards Nanobubble Mediated Drug Delivery. <i>Scientific Reports</i> , 2017, 7, 13517.	1.6	52
20	Role of Surface Tension in Gas Nanobubble Stability Under Ultrasound. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 9949-9956.	4.0	52
21	Enhancing Tumor Drug Distribution With Ultrasound-Triggered Nanobubbles. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 3091-3098.	1.6	52
22	Modeling doxorubicin transport to improve intratumoral drug delivery to RF ablated tumors. <i>Journal of Controlled Release</i> , 2007, 124, 11-19.	4.8	51
23	Noninvasive Characterization of the Effect of Varying PLGA Molecular Weight Blends on <i>in Situ</i> Forming Implant Behavior Using Ultrasound Imaging. <i>Theranostics</i> , 2012, 2, 1064-1077.	4.6	50
24	Effect of Bubble Concentration on the <i>in Vitro</i> and <i>in Vivo</i> Performance of Highly Stable Lipid Shell-Stabilized Micro- and Nanoscale Ultrasound Contrast Agents. <i>Langmuir</i> , 2019, 35, 10192-10202.	1.6	48
25	Real-time Monitoring of Radiofrequency Ablation and Postablation Assessment: Accuracy of Contrast-enhanced US in Experimental Rat Liver Model. <i>Radiology</i> , 2014, 270, 107-116.	3.6	47
26	Bursting microbubbles: How nanobubble contrast agents can enable the future of medical ultrasound molecular imaging and image-guided therapy. <i>Current Opinion in Colloid and Interface Science</i> , 2021, 54, 101463.	3.4	45
27	Characterization of formulation parameters affecting low molecular weight drug release from <i>in situ</i> forming drug delivery systems. <i>Journal of Biomedical Materials Research - Part A</i> , 2010, 94A, 476-484.	2.1	43
28	Toward Precisely Controllable Acoustic Response of Shell-Stabilized Nanobubbles: High Yield and Narrow Dispersity. <i>ACS Nano</i> , 2021, 15, 4901-4915.	7.3	43
29	Real time ultrasound molecular imaging of prostate cancer with PSMA-targeted nanobubbles. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2020, 28, 102213.	1.7	41
30	Contrast-enhanced ultrasound with sub-micron sized contrast agents detects insulinitis in mouse models of type1 diabetes. <i>Nature Communications</i> , 2020, 11, 2238.	5.8	37
31	Porphyryn-Loaded Pluronic Nanobubbles: A New US-Activated Agent for Future Theranostic Applications. <i>Bioconjugate Chemistry</i> , 2018, 29, 234-240.	1.8	36
32	Biodegradable cascade nanocatalysts enable tumor-microenvironment remodeling for controllable CO release and targeted/synergistic cancer nanotherapy. <i>Biomaterials</i> , 2021, 276, 121001.	5.7	35
33	Biomedical Imaging in Implantable Drug Delivery Systems. <i>Current Drug Targets</i> , 2015, 16, 672-682.	1.0	33
34	Combined radiofrequency ablation and doxorubicin-eluting polymer implants for liver cancer treatment. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 81A, 205-213.	2.1	31
35	Effect of cargo properties on <i>in situ</i> forming implant behavior determined by noninvasive ultrasound imaging. <i>Drug Delivery and Translational Research</i> , 2012, 2, 45-55.	3.0	30
36	Combined Tumor Therapy by Using Radiofrequency Ablation and 5-FU-Laden Polymer Implants: Evaluation in Rats and Rabbits. <i>Radiology</i> , 2005, 237, 911-918.	3.6	29

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37	Inhibition of metastasis by HEXIM1 through effects on cell invasion and angiogenesis. <i>Oncogene</i> , 2013, 32, 3829-3839.	2.6	29
38	Effect of the Subcutaneous Environment on Phase-Sensitive In Situ-Forming Implant Drug Release, Degradation, and Microstructure. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 4322-4328.	1.6	29
39	Concurrent visual and acoustic tracking of passive and active delivery of nanobubbles to tumors. <i>Theranostics</i> , 2020, 10, 11690-11706.	4.6	29
40	Macroporous acrylamide phantoms improve prediction of in vivo performance of in situ forming implants. <i>Journal of Controlled Release</i> , 2016, 243, 225-231.	4.8	27
41	Theoretical and Experimental Gas Volume Quantification of Micro- and Nanobubble Ultrasound Contrast Agents. <i>Pharmaceutics</i> , 2020, 12, 208.	2.0	27
42	Combined modeling and experimental approach for the development of dual-release polymer millirods. <i>Journal of Controlled Release</i> , 2002, 83, 427-435.	4.8	25
43	Noninvasive Monitoring of Local Drug Release Using X-ray Computed Tomography: Optimization and In Vitro/In Vivo Validation. <i>Journal of Pharmaceutical Sciences</i> , 2003, 92, 289-296.	1.6	25
44	Injectable Polymer Depot Combined With Radiofrequency Ablation for Treatment of Experimental Carcinoma in Rat. <i>Investigative Radiology</i> , 2006, 41, 890-897.	3.5	25
45	The Effect of Additives on the Behavior of Phase Sensitive In Situ Forming Implants. <i>Journal of Pharmaceutical Sciences</i> , 2015, 104, 3471-3480.	1.6	24
46	Influence of Nanobubble Concentration on Bloodâ€‘Brain Barrier Opening Using Focused Ultrasound Under Real-Time Acoustic Feedback Control. <i>Ultrasound in Medicine and Biology</i> , 2019, 45, 2174-2187.	0.7	24
47	Advances in image-guided intratumoral drug delivery techniques. <i>Therapeutic Delivery</i> , 2010, 1, 307-322.	1.2	23
48	Structural parameters governing activity of Pluronic triblock copolymers in hyperthermia cancer therapy. <i>International Journal of Hyperthermia</i> , 2011, 27, 663-671.	1.1	23
49	Model simulation and experimental validation of intratumoral chemotherapy using multiple polymer implants. <i>Medical and Biological Engineering and Computing</i> , 2008, 46, 1039-1049.	1.6	22
50	Dual-Targeted Microbubbles Specific to Integrin $\alpha_3\beta_1$ and Vascular Endothelial Growth Factor Receptor 2 for Ultrasonography Evaluation of Tumor Angiogenesis. <i>Ultrasound in Medicine and Biology</i> , 2018, 44, 1460-1467.	0.7	21
51	Inhibition of the histone demethylase, KDM5B, directly induces re-expression of tumor suppressor protein HEXIM1 in cancer cells. <i>Breast Cancer Research</i> , 2019, 21, 138.	2.2	20
52	Microfluidic Generation of Monodisperse Nanobubbles by Selective Gas Dissolution. <i>Small</i> , 2021, 17, e2100345.	5.2	20
53	Pickering Bubbles as Dual-Modality Ultrasound and Photoacoustic Contrast Agents. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 22308-22317.	4.0	19
54	Time and Dose Dependence of Pluronic Bioactivity in Hyperthermia-Induced Tumor Cell Death. <i>Experimental Biology and Medicine</i> , 2009, 234, 95-104.	1.1	18

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55	Dynamic Evolutionary Changes in Blood Flow Measured by MDCT in a Hepatic VX2 Tumor Implant over an Extended 28-day Growth Period: Time-Density Curve Analysis. <i>Academic Radiology</i> , 2009, 16, 1483-1492.	1.3	18
56	Increasing Doxorubicin Loading in Lipid-Shelled Perfluoropropane Nanobubbles via a Simple Deprotonation Strategy. <i>Frontiers in Pharmacology</i> , 2020, 11, 644.	1.6	18
57	Molecular imaging of orthotopic prostate cancer with nanobubble ultrasound contrast agents targeted to PSMA. <i>Scientific Reports</i> , 2021, 11, 4726.	1.6	18
58	Combination of Sensitizing Pretreatment and Radiofrequency Tumor Ablation: Evaluation in Rat Model. <i>Radiology</i> , 2008, 246, 796-803.	3.6	17
59	Electrospinning and Imaging. <i>Advanced Engineering Materials</i> , 2012, 14, B266.	1.6	17
60	Photoacoustic imaging biomarkers for monitoring biophysical changes during nanobubble-mediated radiation treatment. <i>Photoacoustics</i> , 2020, 20, 100201.	4.4	16
61	Noninvasive monitoring of local drug release in a rabbit radiofrequency (RF) ablation model using X-ray computed tomography. <i>Journal of Controlled Release</i> , 2002, 83, 415-425.	4.8	15
62	Acoustic Actuation of Integrin- α 5-Bound Microbubbles for Mechanical Phenotyping during Differentiation and Morphogenesis of Human Embryonic Stem Cells. <i>Small</i> , 2018, 14, e1803137.	5.2	15
63	X-ray computed tomography methods for in vivo evaluation of local drug release systems. <i>IEEE Transactions on Medical Imaging</i> , 2002, 21, 1310-1316.	5.4	14
64	Ultrasound-Based Molecular Imaging of Tumors with PTPmu Biomarker-Targeted Nanobubble Contrast Agents. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1983.	1.8	14
65	Effect of intratumoral injection of carboplatin combined with pluronic P85 or L61 on experimental colorectal carcinoma in rats. <i>Experimental Biology and Medicine</i> , 2007, 232, 950-7.	1.1	14
66	Vasomodulation of Tumor Blood Flow: Effect on Perfusion and Thermal Ablation Size. <i>Annals of Biomedical Engineering</i> , 2009, 37, 552-564.	1.3	13
67	Differentiation of Benign Periablational Enhancement from Residual Tumor Following Radio-Frequency Ablation Using Contrast-Enhanced Ultrasonography in a Rat Subcutaneous Colon Cancer Model. <i>Ultrasound in Medicine and Biology</i> , 2012, 38, 443-453.	0.7	13
68	Ultrasound-guided intratumoral delivery of doxorubicin from <i>in situ</i> forming implants in a hepatocellular carcinoma model. <i>Therapeutic Delivery</i> , 2016, 7, 201-212.	1.2	13
69	Radiofrequency Ablation. <i>Academic Radiology</i> , 2009, 16, 321-331.	1.3	11
70	Role of Pluronic block copolymers in modulation of heat shock protein 70 expression. <i>International Journal of Hyperthermia</i> , 2011, 27, 672-681.	1.1	11
71	Increasing Distribution of Drugs Released from In Situ Forming PLGA Implants Using Therapeutic Ultrasound. <i>Annals of Biomedical Engineering</i> , 2017, 45, 2879-2887.	1.3	11
72	Nanobubble Extravasation in Prostate Tumors Imaged with Ultrasound: Role of Active versus Passive Targeting. , 2018, , .		11

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73	An artificially engineered "tumor bio-magnet" for collecting blood-circulating nanoparticles and magnetic hyperthermia. <i>Biomaterials Science</i> , 2019, 7, 1815-1824.	2.6	10
74	Intracellular vesicle entrapment of nanobubble ultrasound contrast agents targeted to PSMA promotes prolonged enhancement and stability <i>in vivo</i> and <i>in vitro</i> . <i>Nanotheranostics</i> , 2022, 6, 270-285.	2.7	10
75	Induction of HEXIM1 activities by HMBA derivative 4a1: Functional consequences and mechanism. <i>Cancer Letters</i> , 2016, 379, 60-69.	3.2	9
76	In situ forming implants exposed to ultrasound enhance therapeutic efficacy in subcutaneous murine tumors. <i>Journal of Controlled Release</i> , 2020, 324, 146-155.	4.8	9
77	Extrusion: A New Method for Rapid Formulation of High-Yield, Monodisperse Nanobubbles. <i>Small</i> , 2022, 18, e2200810.	5.2	9
78	Nondestructive Characterization of Biodegradable Polymer Erosion in Vivo Using Ultrasound Elastography Imaging. <i>ACS Biomaterials Science and Engineering</i> , 2016, 2, 1005-1012.	2.6	8
79	The dance of the nanobubbles: detecting acoustic backscatter from sub-micron bubbles using ultra-high frequency acoustic microscopy. <i>Nanoscale</i> , 2020, 12, 21420-21428.	2.8	8
80	A feasibility study of high intensity focused ultrasound for liver biopsy hemostasis. <i>Ultrasound in Medicine and Biology</i> , 2004, 30, 1531-1537.	0.7	7
81	Quantitative computed tomography analysis of local chemotherapy in liver tissue after radiofrequency ablation1. <i>Academic Radiology</i> , 2004, 11, 1326-1336.	1.3	7
82	Semiquantitative imaging measurement of baseline and vasomodulated normal prostatic blood flow using sildenafil. <i>International Journal of Impotence Research</i> , 2007, 19, 110-113.	1.0	7
83	Preclinical evaluation of radiosensitizing activity of Pluronic block copolymers. <i>International Journal of Radiation Biology</i> , 2013, 89, 801-812.	1.0	7
84	Validation of Ultrasound Elastography Imaging for Nondestructive Characterization of Stiffer Biomaterials. <i>Annals of Biomedical Engineering</i> , 2016, 44, 1515-1523.	1.3	7
85	Iridium(III) Complex-Loaded Perfluoropropane Nanobubbles for Enhanced Sonodynamic Therapy. <i>Bioconjugate Chemistry</i> , 2022, 33, 1057-1068.	1.8	7
86	Image-Guided Therapeutics. <i>Molecular Pharmaceutics</i> , 2010, 7, 1-2.	2.3	6
87	Development of a High-Throughput Ultrasound Technique for the Analysis of Tissue Engineering Constructs. <i>Annals of Biomedical Engineering</i> , 2016, 44, 793-802.	1.3	6
88	Predicting in vivo behavior of injectable, in situ-forming drug-delivery systems. <i>Therapeutic Delivery</i> , 2017, 8, 479-483.	1.2	6
89	Improving Treatment Efficacy of In Situ Forming Implants via Concurrent Delivery of Chemotherapeutic and Chemosensitizer. <i>Scientific Reports</i> , 2020, 10, 6587.	1.6	6
90	Polymer Nanosheet Containing Star-Like Copolymers: A Novel Scalable Controlled Release System. <i>Small</i> , 2018, 14, e1800115.	5.2	5

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91	Development of a novel castration-resistant orthotopic prostate cancer model in New Zealand White rabbit. <i>Prostate</i> , 2022, 82, 695-705.	1.2	5
92	Efficiency of combined blocking of aerobic and glycolytic metabolism pathways in treatment of N1-S1 hepatocellular carcinoma in a rat model. <i>Journal of Cancer Research and Therapeutics</i> , 2017, 13, 533-537.	0.3	5
93	0079: Direct Measurement of Blood Flow Velocity in Small Diameter Vessels Using Contrast-Enhanced Ultrasound. <i>Ultrasound in Medicine and Biology</i> , 2009, 35, S16.	0.7	4
94	Ultrasound signal from sub-micron lipid-coated bubbles. , 2017, , .		4
95	The Effect of Lipid Solubilization on the Performance of Doxorubicin-Loaded Nanobubbles. , 2018, , .		4
96	Radiofrequency Ablation: Effect of Tumor- and Organ-specific Pharmacologic Modulation of Arterial and Portal Venous Blood Flow on Coagulation Diameter in an N1-S1 Tumor Model. <i>Journal of Vascular and Interventional Radiology</i> , 2012, 23, 826-832.	0.2	3
97	Notice of Removal: On the fate of mesh-stabilized lipid nanobubbles after destruction with ultrasound. , 2017, , .		3
98	High-Frequency Array-Based Nanobubble Nonlinear Imaging in a Phantom and <i>In Vivo</i> . <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021, 68, 2059-2074.	1.7	3
99	Research Spotlight: Applications of ultrasound for image-guided drug delivery in cancer chemotherapy. <i>Therapeutic Delivery</i> , 2013, 4, 785-789.	1.2	2
100	Theoretical and experimental investigation of the nonlinear dynamics of nanobubbles excited at clinically relevant ultrasound frequencies and pressures: The role of lipid shell buckling. , 2017, , .		2
101	Effect of the surfactant pluronic on the stability of lipid-stabilized perfluorocarbon nanobubbles. , 2017, , .		2
102	Ultrasound-Enhanced Distribution and Treatment Efficacy of Dox-Loaded Intratumoral In Situ Forming Implants in Murine HCT-15 Tumors. , 2018, , .		2
103	The Effect of Freeze/Thawing on the Physical Properties and Acoustic Performance of Perfluoropropane Nanobubble Suspensions. , 2019, , .		2
104	Ultrasound Triggered Drug Release from Affinity-Based β -Cyclodextrin Polymers for Infection Control. <i>Annals of Biomedical Engineering</i> , 2021, 49, 2513-2521.	1.3	2
105	Formulation of a Thermosensitive Imaging Hydrogel for Topical Application and Rapid Visualization of Tumor Margins in the Surgical Cavity. <i>Cancers</i> , 2022, 14, 3459.	1.7	2
106	Image-Guided Development of Biomaterials: Enabling Technologies Shaping and Expediting the Future of Materials in Medicine. <i>Annals of Biomedical Engineering</i> , 2016, 44, 619-620.	1.3	1
107	Ultrasound signal from sub-micron lipid-coated bubbles. , 2017, , .		1
108	Enhancing fluorescein distribution from in situ forming PLGA implants using therapeutic ultrasound. , 2017, , .		1

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109	Using ultrasound and photoacoustics to monitor in situ forming implant structure and drug release. , 2017, , .		1
110	Theoretical and experimental investigation of the nonlinear dynamics of nanobubbles excited at clinically relevant ultrasound frequencies and pressures: The role of lipid shell buckling. , 2017, , .		1
111	Nanobubble Facilitated Optoporation and Photoacoustic Imaging of BT-474 Breast Cancer Cells. , 2018, , .		1
112	Quantification of PSMA expression in prostate cancer by pharmacokinetic modeling of targeted ultrasound nanobubbles. , 2019, , .		1
113	In vitro Preparation and Characterization of Magnetic Nanobubbles. , 2019, , .		1
114	Delayed response to proton beam treatment of hepatocellular carcinoma. BJR case Reports, 2020, 6, 20180125.	0.1	1
115	Abstract 260: Apigenin nanoparticle suppresses sphere formation in CD133+/ALDH1high prostate cancer stem cells through downregulation of stem cell markers. , 2018, , .		1
116	Pharmacokinetic Modeling of the Second-Wave Phenomenon in Nanobubble-Based Contrast-Enhanced Ultrasound. IEEE Transactions on Biomedical Engineering, 2023, 70, 42-54.	2.5	1
117	Sonotheranostics and Sonogenetics Special Issue. Bioconjugate Chemistry, 2022, 33, 991-992.	1.8	1
118	Enhancing fluorescein release from in-situ forming PLGA implants using therapeutic ultrasound. , 2017, , .		0
119	Ultrasound characterization of slow precipitating implants for vascular occlusion. , 2017, , .		0
120	Notice of Removal: Nanobubble contrast agents enhance ultrasound imaging of prostate tumors in mice. , 2017, , .		0
121	Effect of the surfactant pluronic on the stability of lipid-stabilized perfluorocarbon nanobubbles. , 2017, , .		0
122	Using ultrasound and photoacoustics to monitor in situ forming implant structure and drug release. , 2017, , .		0
123	Ultrasound characterization of slow precipitating implants for vascular occlusion. , 2017, , .		0
124	Tunable Polymer Embolic Implant for Vascular Occlusion. ACS Biomaterials Science and Engineering, 2019, 5, 1849-1856.	2.6	0
125	Radiation-enhanced nanobubble therapy: Monitoring treatment effects using photoacoustic imaging. , 2019, , .		0
126	TECHNIQUES IN X-RAY COMPUTED TOMOGRAPHY IN THE EVALUATION OF DRUG RELEASE SYSTEMS AND THEIR APPLICATION. , 2005, , 105-131.		0

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127	Post radiofrequency ablation assessment of colorectal cancer liver metastases – does post ablation biopsy really matter?. Translational Cancer Research, 2016, 5, S411-S414.	0.4	0
128	Individual nanobubbles detection using acoustic based flow cytometry. , 2019, , .		0
129	Effects of shell-integrated Sudan Black dye on the acoustic activity and ultrasound imaging properties of lipid-shelled nanoscale ultrasound contrast agents. Journal of Biomedical Optics, 2022, 27, .	1.4	0