

Mladen Barbic

List of Publications by Year in descending order

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Version: 2024-02-01

39
papers

4,599
citations

430874

18
h-index

377865

34
g-index

41
all docs

41
docs citations

41
times ranked

7073
citing authors

#	ARTICLE	IF	CITATIONS
1	Shape effects in plasmon resonance of individual colloidal silver nanoparticles. <i>Journal of Chemical Physics</i> , 2002, 116, 6755-6759.	3.0	1,599
2	Fully integrated silicon probes for high-density recording of neural activity. <i>Nature</i> , 2017, 551, 232-236.	27.8	1,531
3	Nanowire-based very-high-frequency electromechanical resonator. <i>Applied Physics Letters</i> , 2003, 83, 1240-1242.	3.3	307
4	Multi-array silicon probes with integrated optical fibers: light-assisted perturbation and recording of local neural circuits in the behaving animal. <i>European Journal of Neuroscience</i> , 2010, 31, 2279-2291.	2.6	222
5	Writing and reading of single magnetic domain per bit perpendicular patterned media. <i>Applied Physics Letters</i> , 1999, 74, 2516-2518.	3.3	122
6	Single crystal silver nanowires prepared by the metal amplification method. <i>Journal of Applied Physics</i> , 2002, 91, 9341-9345.	2.5	119
7	Evaluating the potential of using quantum dots for monitoring electrical signals in neurons. <i>Nature Nanotechnology</i> , 2018, 13, 278-288.	31.5	96
8	Electromagnetic micromotor for microfluidics applications. <i>Applied Physics Letters</i> , 2001, 79, 1399-1401.	3.3	85
9	Quantum dot-based multiphoton fluorescent pipettes for targeted neuronal electrophysiology. <i>Nature Methods</i> , 2014, 11, 1237-1241.	19.0	70
10	Scanning probe electromagnetic tweezers. <i>Applied Physics Letters</i> , 2001, 79, 1897-1899.	3.3	45
11	Magnetic force microscopy using nonoptical piezoelectric quartz tuning fork detection design with applications to magnetic recording studies. <i>Journal of Applied Physics</i> , 1998, 83, 6229-6231.	2.5	44
12	Magnetic wires in MEMS and bio-medical applications. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 249, 357-367.	2.3	43
13	Multimodal in vivo brain electrophysiology with integrated glass microelectrodes. <i>Nature Biomedical Engineering</i> , 2019, 3, 741-753.	22.5	40
14	Possible magneto-mechanical and magneto-thermal mechanisms of ion channel activation in magnetogenetics. <i>ELife</i> , 2019, 8, .	6.0	39
15	Femto-Newton force sensitivity quartz tuning fork sensor. <i>Sensors and Actuators A: Physical</i> , 2007, 136, 564-566.	4.1	33
16	Miniature high-sensitivity quartz tuning fork alternating gradient magnetometry. <i>Applied Physics Letters</i> , 1998, 73, 3595-3597.	3.3	32
17	Fabrication and characterization of high aspect ratio perpendicular patterned information storage media in an Al ₂ O ₃ /GaAs substrate. <i>Journal of Applied Physics</i> , 1999, 85, 5489-5491.	2.5	27
18	Magnetic nanostructures as amplifiers of transverse fields in magnetic resonance. <i>Solid State Nuclear Magnetic Resonance</i> , 2005, 28, 91-105.	2.3	20

#	ARTICLE	IF	CITATIONS
19	Composite Nanowire-Based Probes for Magnetic Resonance Force Microscopy. Nano Letters, 2005, 5, 187-190.	9.1	17
20	Detachable glass microelectrodes for recording action potentials in active moving organs. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 312, H1248-H1259.	3.2	13
21	Magnetic resonance diffraction using the magnetic field from a ferromagnetic sphere. Journal of Applied Physics, 2002, 91, 9987.	2.5	12
22	Sensitive measurement of reversible parallel and transverse susceptibility by alternating gradient magnetometry. Review of Scientific Instruments, 2004, 75, 5016-5021.	1.3	12
23	Perpendicular patterned media in an $(\text{Al}_{0.9}\text{Ga}_{0.1})_2\text{O}_3/\text{GaAs}$ substrate for magnetic storage. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 3190.	1.6	10
24	Sensitive enhancement of vessel wall imaging with an endoesophageal Wireless Amplified NMR Detector (WAND). Magnetic Resonance in Medicine, 2017, 78, 2048-2054.	3.0	9
25	Magnetocaloric materials as switchable high contrast ratio MRI labels. Magnetic Resonance in Medicine, 2019, 81, 2238-2246.	3.0	9
26	Sample-detector coupling in atomic resolution magnetic resonance diffraction. Journal of Applied Physics, 2002, 92, 7345-7354.	2.5	8
27	Two-dimensional magnetic resonance tomographic microscopy using ferromagnetic probes. Journal of Applied Physics, 2004, 95, 3598-3606.	2.5	6
28	Stray field magnetic resonance tomography using ferromagnetic spheres. Journal of Magnetic Resonance, 2006, 181, 223-228.	2.1	6
29	Multifield and inverse contrast switching of magnetocaloric high contrast ratio MRI labels. Magnetic Resonance in Medicine, 2021, 85, 506-517.	3.0	5
30	Nanomagnetic Planar Magnetic Resonance Microscopy "Lens". Nano Letters, 2005, 5, 787-792.	9.1	4
31	Effect of magnetic nanoparticle shape on flux amplification in inductive coil magnetic resonance detection. Journal of Applied Physics, 2016, 120, .	2.5	4
32	Spectroscopic studies of individual plasmon resonant nanoparticles. , 2003, 5221, 66.		2
33	Stripe Sensor Tomography and application to microcoil Magnetic Resonance Imaging. , 2009, , .		2
34	Parametric amplification of reversible transverse susceptibility in single domain magnetic nanoparticles. AIP Advances, 2019, 9, 045031.	1.3	2
35	Modeling of magnetization dynamics and thermal magnetic moment fluctuations in nanoparticle-enhanced magnetic resonance detection. Journal of Applied Physics, 2021, 129, .	2.5	2
36	Planar self-biased magnetic resonance microscopy "lenses". Concepts in Magnetic Resonance Part B, 2008, 33B, 21-31.	0.7	1

#	ARTICLE	IF	CITATIONS
37	Stripe sensor tomography. Review of Scientific Instruments, 2008, 79, 033705.	1.3	1
38	Magnetic Resonance Force Microscopy. , 0, , 49-63.		0
39	Visualization and neuronal cell targeting during electrophysiological recordings facilitated by quantum dots. Proceedings of SPIE, 2015, , .	0.8	0