

Ugo Valbusa

List of Publications by Year in descending order

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95
papers

3,587
citations

101543

36
h-index

149698

56
g-index

96
all docs

96
docs citations

96
times ranked

3445
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrical biosensing with synthetic nanopores and nanochannels. <i>Current Opinion in Electrochemistry</i> , 2021, 29, 100754.	4.8	4
2	Junction gap breakdown-based fabrication of polydimethylsiloxane ionic rectifiers. <i>Journal of Micromechanics and Microengineering</i> , 2020, 30, 025004.	2.6	3
3	Integrating Microstructured Electrospun Scaffolds in an Open Microfluidic System for in Vitro Studies of Human Patient-Derived Primary Cells. <i>ACS Biomaterials Science and Engineering</i> , 2020, 6, 3649-3663.	5.2	8
4	The Role of Surfaces in Gas Transport Through Polymer Membranes. <i>Polymers</i> , 2019, 11, 910.	4.5	7
5	Plastic ingestion in aquatic-associated bird species in southern Portugal. <i>Marine Pollution Bulletin</i> , 2018, 126, 413-418.	5.0	27
6	Gas permeation through rubbery polymer nano-corrugated membranes. <i>Scientific Reports</i> , 2018, 8, 6345.	3.3	19
7	Engineered Kidney Tubules for Modeling Patient-Specific Diseases and Drug Discovery. <i>EBioMedicine</i> , 2018, 33, 253-268.	6.1	27
8	Symmetric curvature descriptors for label-free analysis of DNA. <i>Scientific Reports</i> , 2015, 4, 6459.	3.3	1
9	Permeability thickness dependence of polydimethylsiloxane (PDMS) membranes. <i>Journal of Membrane Science</i> , 2015, 481, 1-8.	8.2	175
10	Simultaneous Electro-Optical Tracking for Nanoparticle Recognition and Counting. <i>Nano Letters</i> , 2015, 15, 5696-5701.	9.1	28
11	Selective protein detection with a dsLNA-functionalized nanopore. <i>Biosensors and Bioelectronics</i> , 2015, 64, 219-226.	10.1	14
12	Stretching of DNA confined in nanochannels with charged walls. <i>Biomicrofluidics</i> , 2014, 8, 064121.	2.4	21
13	Nano-holes as standard leak elements. <i>Measurement: Journal of the International Measurement Confederation</i> , 2014, 58, 335-341.	5.0	26
14	Role of substrate morphology in ion induced dewetting of thin solid films. <i>Applied Surface Science</i> , 2014, 315, 432-439.	6.1	8
15	Conformations of DNA in Triangular Nanochannels. <i>Macromolecules</i> , 2013, 46, 4198-4206.	4.8	24
16	Mechanical squeezing of an elastomeric nanochannel device: numerical simulations and ionic current characterization. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 21-30.	2.2	11
17	Bioactive surfaces for antibody-antigen complex detection by Atomic Force Microscopy. <i>Journal of Physics: Conference Series</i> , 2013, 439, 012001.	0.4	13
18	Nanotechnology for Life Sciences. <i>Nanoscience and Nanotechnology Letters</i> , 2013, 5, 1132-1140.	0.4	0

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19	Label-free, atomic force microscopy-based mapping of DNA intrinsic curvature for the nanoscale comparative analysis of bent duplexes. <i>Nucleic Acids Research</i> , 2012, 40, e84-e84.	14.5	6
20	Ion induced spinodal dewetting of thin solid films. <i>Applied Physics Letters</i> , 2012, 100, 223113.	3.3	23
21	Order versus Disorder: in vivo bone formation within osteoconductive scaffolds. <i>Scientific Reports</i> , 2012, 2, 274.	3.3	67
22	Size and functional tuning of solid state nanopores by chemical functionalization. <i>Nanotechnology</i> , 2012, 23, 435301.	2.6	15
23	Modulating DNA Translocation by a Controlled Deformation of a PDMS Nanochannel Device. <i>Scientific Reports</i> , 2012, 2, 791.	3.3	38
24	Atomic Force Microscopy for DNA SNP Identification. <i>Nanoscience and Technology</i> , 2012, , 79-98.	1.5	0
25	DNA manipulation with elastomeric nanostructures fabricated by soft-moulding of a FIB-patterned stamp. <i>Lab on A Chip</i> , 2011, 11, 2625.	6.0	33
26	DNA detection with a polymeric nanochannel device. <i>Lab on A Chip</i> , 2011, 11, 2961.	6.0	48
27	Binding force measurement of NF- κ B-ODNs interaction: An AFM based decoy and drug testing tool. <i>Biosensors and Bioelectronics</i> , 2011, 28, 158-165.	10.1	4
28	“DNA-Dressed Nanopore” for complementary sequence detection. <i>Biosensors and Bioelectronics</i> , 2011, 29, 125-131.	10.1	41
29	Crystals of the hydrogenase maturation factor HypF N-terminal domain grown in microgravity, display improved internal order. <i>Journal of Crystal Growth</i> , 2011, 314, 246-251.	1.5	2
30	Interactions of single-wall carbon nanotubes with endothelial cells. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2010, 6, 277-288.	3.3	72
31	Label-free quantification of activated NF- κ B in biological samples by atomic force microscopy. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2490-2496.	10.1	11
32	DNA-functionalized solid state nanopore for biosensing. <i>Nanotechnology</i> , 2010, 21, 145102.	2.6	42
33	Applications of metal surfaces nanostructured by ion beam sputtering. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 224022.	1.8	27
34	Fabrication of Elastomeric Nanofluidic Devices for Manipulation of Long DNA Molecules. <i>Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering</i> , 2009, , 134-140.	0.3	1
35	Fast three-dimensional nanoscale metrology in dual-beam FIB-SEM instrumentation. <i>Ultramicroscopy</i> , 2009, 109, 1338-1342.	1.9	6
36	Preparation and properties of macroporous brushite bone cements. <i>Acta Biomaterialia</i> , 2009, 5, 2161-2168.	8.3	43

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37	Optically addressable single molecule magnet behaviour of vacuum-sprayed ultrathin films. Journal of Materials Chemistry, 2008, 18, 109-115.	6.7	26
38	Patterning polycrystalline thin films by defocused ion beam: The influence of initial morphology on the evolution of self-organized nanostructures. Journal of Applied Physics, 2008, 104, .	2.5	50
39	Nanotechnology Applications in Medicine. Tumori, 2008, 94, 206-215.	1.1	27
40	Nanotechnology applications in medicine. Tumori, 2008, 94, 206-15.	1.1	10
41	Deformation and Adhesion of Elastomer Poly(dimethylsiloxane) Colloidal AFM Probes. Langmuir, 2007, 23, 9293-9302.	3.5	33
42	Atomic force microscopy and X-ray photoelectron spectroscopy characterization of low-energy ion sputtered mica. Surface Science, 2007, 601, 2735-2739.	1.9	18
43	The Role of Nanoroughness in Contact Mechanics. Nanoscience and Technology, 2007, , 345-359.	1.5	0
44	Morphological and Tribological Characterization of Rough Surfaces by Atomic Force Microscopy. Nanoscience and Technology, 2006, , 261-298.	1.5	3
45	Surface nanostructuring and optical activation of lithium fluoride crystals by ion beam irradiation. Applied Physics Letters, 2006, 88, 103116.	3.3	37
46	Nanostructuring Rh(110) Surfaces by Ion Etching. Materials Research Society Symposia Proceedings, 2006, 960, 1.	0.1	0
47	Probing the Role of Nanoroughness in Contact Mechanics by Atomic Force Microscopy. Advances in Science and Technology, 2006, 51, 90.	0.2	2
48	Interfacial dynamics of the rhomboidal pyramid pattern on ion-eroded Cu(110). Physical Review B, 2006, 73, .	3.2	14
49	Structural Depinning of Ne Monolayers on Pb at $T < 6.5 \text{ \AA} \text{ K}$. Physical Review Letters, 2006, 96, 216101.	7.8	41
50	Nanostructuring polymers by soft lithography templates realized via ion sputtering. Nanotechnology, 2005, 16, 2714-2717.	2.6	5
51	New insights on the stereodynamics of ethylene adsorption on an oxygen-precovered silver surface. Journal of Chemical Physics, 2005, 123, 224709.	3.0	19
52	Ripples and ripples: from sandy deserts to ion-sputtered surfaces. New Journal of Physics, 2005, 7, 122-122.	2.9	54
53	Unexpected Behavior of the Surface Composition of PtRh Alloys during Chemical Reaction. Journal of the American Chemical Society, 2005, 127, 5671-5674.	13.7	18
54	Adatom Ascending at Step Edges and Faceting on fcc Metal (110) Surfaces. Physical Review Letters, 2004, 92, 106102.	7.8	52

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55	Uniaxial magnetic anisotropy tuned by nanoscale ripple formation: Ion-sculpting of Co/Cu(001) thin films. <i>Applied Physics Letters</i> , 2004, 84, 762-764.	3.3	38
56	A simple and compact mechanical velocity selector of use to analyze/select molecular alignment in supersonic seeded beams. <i>Review of Scientific Instruments</i> , 2004, 75, 349-354.	1.3	22
57	Surface analysis of paper documents damaged by foxing. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 383-387.	2.3	18
58	Stereodynamic Effects in the Adsorption of Ethylene onto a Metal Surface. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 5200-5203.	13.8	50
59	Surface instabilities in granular matter and ion-sputtered surfaces. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 332, 548-558.	2.6	33
60	Contact mechanics and friction of fractal surfaces probed by atomic force microscopy. <i>Wear</i> , 2003, 254, 917-923.	3.1	33
61	The contact mechanics of fractal surfaces. <i>Nature Materials</i> , 2003, 2, 233-236.	27.5	102
62	Fabrication of stable nanopatterns on metals. <i>Applied Physics Letters</i> , 2002, 81, 2632-2634.	3.3	11
63	Nanostructuring surfaces by ion sputtering. <i>Journal of Physics Condensed Matter</i> , 2002, 14, 8153-8175.	1.8	377
64	Friction force microscopy investigation of nanostructured carbon films. <i>Carbon</i> , 2002, 40, 883-890.	10.3	30
65	Submonolayer homoepitaxial growth on Ag(110). <i>Surface Science</i> , 2001, 487, 49-54.	1.9	26
66	Oxygen interaction with disordered and nanostructured Ag(001) surfaces. <i>Journal of Chemical Physics</i> , 2001, 115, 3346-3355.	3.0	47
67	Is Ion Sputtering Always a "Negative Homoepitaxial Deposition"? <i>Physical Review Letters</i> , 2001, 86, 838-841.	7.8	71
68	Self-affine properties of cluster-assembled carbon thin films. <i>Surface Science</i> , 2000, 444, L1-L6.	1.9	57
69	Tuning surface reactivity by in situ surface nanostructuring. <i>Journal of Chemical Physics</i> , 2000, 112, 6840-6843.	3.0	43
70	C60 thin films on Ag(001): an STM study. <i>Carbon</i> , 1999, 37, 727-732.	10.3	27
71	Collision induced desorption and dissociation of O ₂ chemisorbed on Ag(001). <i>Journal of Chemical Physics</i> , 1998, 109, 2490-2502.	3.0	33
72	Oxygen adsorption on Ag(111). <i>Surface Science</i> , 1995, 339, 291-296.	1.9	55

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73	Low-temperature dissociation of O ₂ on Ag(110): Surface disorder and reconstruction. Physical Review B, 1994, 49, 5113-5116.	3.2	66
74	Azimuthal dependence of sticking probability of O ₂ on Ag(110). Physical Review Letters, 1994, 72, 510-513.	7.8	64
75	Anharmonic shift in the stretching frequency of O ₂ chemisorbed on Ag (110). Surface Science, 1994, 314, L904-L908.	1.9	40
76	Coverage dependence of the O-Ag (110) vibration. Surface Science, 1994, 317, L1120-L1123.	1.9	26
77	Surface plasmon on Ag(110): Observation of linear and positive dispersion and strong azimuthal anisotropy. Physical Review Letters, 1992, 69, 2122-2125.	7.8	75
78	Temperature dependence of surface plasmons on Ag(001). Physical Review B, 1992, 45, 1399-1402.	3.2	49
79	Apparatus for adsorption studies. Review of Scientific Instruments, 1991, 62, 2172-2176.	1.3	74
80	Comment on "Surface-plasmon energy and dispersion on Ag single crystals". Physical Review Letters, 1991, 67, 3197-3197.	7.8	53
81	Angular dependence of dipole scattering cross section: Surface-plasmon losses on Ag(100). Physical Review Letters, 1990, 64, 2398-2401.	7.8	96
82	Rayleigh wave dispersion on Ag(100) along the Γ 100 direction. Physical Review B, 1990, 41, 12905-12907.	3.2	24
83	Surface-plasmon spectrum of Ag(001) measured by high-resolution angle-resolved electron-energy-loss spectroscopy. Physical Review B, 1990, 42, 2835-2841.	3.2	67
84	Surface phonons in graphite (001). Surface Science, 1986, 178, 545-552.	1.9	28
85	Hydrogen atom scattering from physisorbed overlayers. Surface Science, 1985, 155, 499-534.	1.9	33
86	Atom scattering as a quantitative surface probe: Noble-gas monolayer and bilayer adsorbed on graphite. Physical Review B, 1984, 30, 4203-4206.	3.2	20
87	Surface vibrations of atoms physisorbed on a crystal surface: monolayer and bilayer xenon on (0001) graphite. Chemical Physics Letters, 1983, 94, 247-249.	2.6	39
88	Study of the Ag(110) surface by He diffraction. Surface Science, 1983, 126, 695-701.	1.9	33
89	Accurate He-Ag(110) interaction potential determination by selective adsorption. Surface Science, 1982, 120, L447-L452.	1.9	53
90	Diffraction scattering of H atoms from an ordered xenon overlayer adsorbed on the (0001) surface of graphite. Physical Review B, 1981, 24, 2307-2310.	3.2	47

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91	Selective adsorption of H_2 and D_2 on the (0001) graphite surface. <i>Surface Science</i> , 1980, 93, 515-525.	1.9	147
92	H-Ar potential from high-resolution differential cross-section measurements at thermal energy. <i>Physical Review A</i> , 1976, 13, 584-594.	2.5	33
93	Determination of the Interatomic Potential of Krypton. <i>Physical Review A</i> , 1973, 8, 2409-2416.	2.5	61
94	Energy dependence of the differential collision cross section for hydrogen at thermal energies. <i>Chemical Physics Letters</i> , 1972, 17, 137-141.	2.6	49
95	Rainbow scattering and the intermolecular potential of argon. <i>Chemical Physics Letters</i> , 1970, 7, 303-305.	2.6	33