

# Jörg Weissmüller

## List of Publications by Year in descending order

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215  
papers

12,357  
citations

23567

58  
h-index

29157

104  
g-index

222  
all docs

222  
docs citations

222  
times ranked

7432  
citing authors

#	ARTICLE	IF	CITATIONS
1	A general theory of curved deformable interfaces in solids at equilibrium. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1998, 78, 1093-1109.	0.6	775
2	Alloy effects in nanostructures. Scripta Materialia, 1993, 3, 261-272.	0.5	490
3	Surface-chemistry-driven actuation in nanoporous gold. Nature Materials, 2009, 8, 47-51.	27.5	488
4	Charge-Induced Reversible Strain in a Metal. Science, 2003, 300, 312-315.	12.6	485
5	Volume Change during the Formation of Nanoporous Gold by Dealloying. Physical Review Letters, 2006, 97, 035504.	7.8	386
6	Surface-Stress Induced Macroscopic Bending of Nanoporous Gold Cantilevers. Nano Letters, 2004, 4, 793-796.	9.1	382
7	Approaching the theoretical strength in nanoporous Au. Applied Physics Letters, 2006, 89, 061920.	3.3	286
8	Nanoporous Au-Pt Alloys As Large Strain Electrochemical Actuators. Nano Letters, 2010, 10, 187-194.	9.1	286
9	Nanoporous Metals by Alloy Corrosion: Formation and Mechanical Properties. MRS Bulletin, 2009, 34, 577-586.	3.5	264
10	Mean stresses in microstructures due to interface stresses: A generalization of a capillary equation for solids. Acta Materialia, 1997, 45, 1899-1906.	7.9	206
11	Deforming nanoporous metal: Role of lattice coherency. Acta Materialia, 2009, 57, 2665-2672.	7.9	198
12	Hierarchical Nested-Network Nanostructure by Dealloying. ACS Nano, 2013, 7, 5948-5954.	14.6	188
13	A Material with Electrically Tunable Strength and Flow Stress. Science, 2011, 332, 1179-1182.	12.6	165
14	Alloy thermodynamics in nanostructures. Journal of Materials Research, 1994, 9, 4-7.	2.6	163
15	Nanocrystalline materials: a way to solids with tunable electronic structures and properties?. Acta Materialia, 2001, 49, 737-745.	7.9	160
16	Reconstructing a Nanoporous Metal in Three Dimensions: An Electron Tomography Study of Dealloyed Gold Leaf. Advanced Engineering Materials, 2007, 9, 535-541.	3.5	152
17	3D stochastic bicontinuous microstructures: Generation, topology and elasticity. Acta Materialia, 2018, 149, 326-340.	7.9	146
18	Scaling laws of nanoporous metals under uniaxial compression. Acta Materialia, 2014, 67, 252-265.	7.9	140

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19	Microstructure evolution during rolling of inert-gas condensed palladium. Scripta Materialia, 2003, 49, 637-644.	5.2	124
20	A note on surface stress and surface tension and their interrelation via Shuttleworth's equation and the Lippmann equation. Surface Science, 2007, 601, 3042-3051.	1.9	123
21	Deformation mechanisms in nanocrystalline palladium at large strains. Acta Materialia, 2009, 57, 3391-3401.	7.9	122
22	Nanoporous Gold—Testing Macro-scale Samples to Probe Small-scale Mechanical Behavior. Materials Research Letters, 2016, 4, 27-36.	8.7	121
23	Surface Chemistry in Nanoscale Materials. Materials, 2009, 2, 2404-2428.	2.9	119
24	Anomalous compliance and early yielding of nanoporous gold. Acta Materialia, 2015, 93, 144-155.	7.9	116
25	Bulk Nanoporous Metal for Actuation. Advanced Engineering Materials, 2010, 12, 714-723.	3.5	112
26	Macroscopic 3D Nanographene with Dynamically Tunable Bulk Properties. Advanced Materials, 2012, 24, 5083-5087.	21.0	111
27	Sign-inverted surface stress-charge response in nanoporous gold. Surface Science, 2008, 602, 3588-3594.	1.9	109
28	Grain-boundary atomic structure in nanocrystalline palladium from x-ray atomic distribution functions. Physical Review B, 1995, 52, 7076-7093.	3.2	104
29	Nanoporous Metals with Structural Hierarchy: A Review. Advanced Engineering Materials, 2017, 19, 1700389.	3.5	103
30	Switchable imbibition in nanoporous gold. Nature Communications, 2014, 5, 4237.	12.8	102
31	Electronic properties of 4-nm FePt particles. Physical Review B, 2003, 67, .	3.2	101
32	Atomic structure and thermal stability of nanostructured Y-Fe alloys. Scripta Materialia, 1992, 1, 439-447.	0.5	99
33	Structural evolution and phase formation in cold-rolled aluminum–nickel multilayers. Acta Materialia, 2001, 49, 1139-1151.	7.9	97
34	Dealloyed nanoporous materials with interface-controlled behavior. MRS Bulletin, 2018, 43, 14-19.	3.5	92
35	Composites of Nanoporous Gold and Polymer. Advanced Materials, 2013, 25, 1280-1284.	21.0	91
36	Deformation twinning in nanocrystalline Pd. Philosophical Magazine Letters, 2004, 84, 321-334.	1.2	90

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37	Adsorbate effects on the surface stress—charge response of platinum electrodes. <i>Electrochimica Acta</i> , 2008, 53, 2757-2767.	5.2	89
38	Scaling behavior of stiffness and strength of hierarchical network nanomaterials. <i>Science</i> , 2021, 371, 1026-1033.	12.6	88
39	Dealloying-based interpenetrating-phase nanocomposites matching the elastic behavior of human bone. <i>Scientific Reports</i> , 2017, 7, 20.	3.3	84
40	Deforming Nanocrystalline Metals: New Insights, New Puzzles. <i>Advanced Engineering Materials</i> , 2005, 7, 202-207.	3.5	82
41	Mechanical response of nanoporous metals: A story of size, surface stress, and severed struts. <i>MRS Bulletin</i> , 2018, 43, 35-42.	3.5	81
42	Analysis of the small-angle neutron scattering of nanocrystalline ferromagnets using a micromagnetics model. <i>Physical Review B</i> , 2001, 63, .	3.2	79
43	Atomistic origin of microstrain broadening in diffraction data of nanocrystalline solids. <i>Acta Materialia</i> , 2009, 57, 1648-1654.	7.9	79
44	Magnetic-field-dependent small-angle neutron scattering on random anisotropy ferromagnets. <i>Reports on Progress in Physics</i> , 2008, 71, 066501.	20.1	78
45	Atomic structure of nanocrystalline metals studied by diffraction techniques and EXAFS. <i>Scripta Materialia</i> , 1995, 6, 105-114.	0.5	74
46	Grain boundary segregation, stress and stretch: Effects on hydrogen absorption in nanocrystalline palladium. <i>Acta Materialia</i> , 2007, 55, 1241-1254.	7.9	74
47	Range of Magnetic Correlations in Nanocrystalline Soft Magnets. <i>Physical Review Letters</i> , 2003, 91, 267204.	7.8	73
48	Ab initio study of surface stress response to charging. <i>Europhysics Letters</i> , 2007, 78, 13001.	2.0	73
49	Deformation of solids with nanoscale pores by the action of capillary forces. <i>Acta Materialia</i> , 2010, 58, 1-13.	7.9	69
50	Electronic and Magnetic Properties of Monodispersed FePt Nanoparticles. <i>Advanced Materials</i> , 2002, 14, 24-27.	21.0	66
51	Two-phase equilibrium in small alloy particles. <i>Scripta Materialia</i> , 2004, 51, 813-818.	5.2	66
52	Porous Gold with a Nested Network Architecture and Ultrafine Structure. <i>Advanced Functional Materials</i> , 2015, 25, 2530-2536.	14.9	65
53	Validating grain size analysis from X-ray line broadening: A virtual experiment. <i>Scripta Materialia</i> , 2008, 59, 15-18.	5.2	63
54	Elastic and plastic Poisson's ratios of nanoporous gold. <i>Scripta Materialia</i> , 2016, 110, 65-69.	5.2	61

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55	Balance of Force at Curved Solid Metal~Liquid Electrolyte Interfaces. <i>Langmuir</i> , 2005, 21, 4592-4603.	3.5	60
56	Surface Stress-Charge Response of a (111)-Textured Gold Electrode under Conditions of Weak Ion Adsorption. <i>Langmuir</i> , 2008, 24, 8561-8567.	3.5	60
57	Open porous dealloying-based biomaterials as a novel biomaterial platform. <i>Materials Science and Engineering C</i> , 2018, 88, 95-103.	7.3	60
58	Structural Relaxation in Charged Metal Surfaces and Cluster Ions. <i>Small</i> , 2006, 2, 1497-1503.	10.0	59
59	Mechanical modulation of reaction rates in electrocatalysis. <i>Journal of Catalysis</i> , 2014, 309, 351-361.	6.2	59
60	Silver-rich clusters in nanoporous gold. <i>Materials Research Letters</i> , 2017, 5, 314-321.	8.7	59
61	Dealloying-based metal-polymer composites for biomedical applications. <i>Scripta Materialia</i> , 2018, 146, 290-294.	5.2	59
62	Macroscopically Strong Nanoporous Pt Prepared by Dealloying. <i>Advanced Engineering Materials</i> , 2007, 9, 849-854.	3.5	58
63	Nanoporous-gold-based composites: toward tensile ductility. <i>NPG Asia Materials</i> , 2015, 7, e187-e187.	7.9	57
64	Electrocatalytic methanol oxidation with nanoporous gold: microstructure and selectivity. <i>Nanoscale</i> , 2017, 9, 17839-17848.	5.6	57
65	Magnetic properties of MnFe <sub>2</sub> O <sub>4</sub> nanoparticles. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 617-620.	2.3	56
66	Plastic Poisson's Ratio of Nanoporous Metals: A Macroscopic Signature of Tension~Compression Asymmetry at the Nanoscale. <i>Nano Letters</i> , 2017, 17, 6258-6266.	9.1	55
67	Lattice Constants of Solid Solution Microstructures: The Case of Nanocrystalline Pd-H. <i>Physical Review Letters</i> , 1999, 82, 213-216.	7.8	54
68	Synthesis and Magnetic Studies of Nanocrystalline Nickel Nitride Material. <i>Physica Status Solidi A</i> , 2002, 189, 691-695.	1.7	54
69	Electrical stiffness modulation~confirming the impact of surface excess elasticity on the mechanics of nanomaterials. <i>Acta Materialia</i> , 2014, 76, 272-280.	7.9	54
70	Nanoporous Gold by Alloy Corrosion: Method-Structure-Property Relationships. <i>Journal of the Electrochemical Society</i> , 2017, 164, C194-C200.	2.9	52
71	The vibrational excitations and the position of hydrogen in nanocrystalline palladium. <i>Journal of Physics Condensed Matter</i> , 1995, 7, 219-230.	1.8	51
72	Variation of the Surface Stress~Charge Coefficient of Platinum with Electrolyte Concentration. <i>Langmuir</i> , 2005, 21, 4604-4609.	3.5	51

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73	Piezoelectric Gold: Strong Charge-Load Response in a Metal-Based Hybrid Nanomaterial. <i>Advanced Functional Materials</i> , 2016, 26, 5174-5181.	14.9	51
74	On the size dependence of the critical point of nanoscale interstitial solid solutions. <i>Philosophical Magazine Letters</i> , 2000, 80, 411-418.	1.2	50
75	Cantilever Bending with Rough Surfaces. <i>Physical Review Letters</i> , 2008, 101, 146102.	7.8	50
76	HRTEM observation of interfacial dislocations at faceted Al-Pb interfaces. <i>Philosophical Magazine Letters</i> , 2004, 84, 673-683.	1.2	46
77	Nanoporous magnesium. <i>Nano Research</i> , 2018, 11, 6428-6435.	10.4	46
78	The impact of particle morphology on the melting characteristics of matrix-embedded Pb nanocrystals. <i>Philosophical Magazine Letters</i> , 2003, 83, 511-523.	1.2	45
79	Electrocapillary maximum and potential of zero charge of carbon aerogel. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 7580.	2.8	44
80	Spin structure of nanocrystalline terbium. <i>Physical Review B</i> , 2004, 69, .	3.2	43
81	Catalytic activity of nanostructured Au: Scale effects versus bimetallic/bifunctional effects in low-temperature CO oxidation on nanoporous Au. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 111-128.	2.8	43
82	On the impact of capillarity for strength at the nanoscale. <i>Nature Communications</i> , 2017, 8, 1976.	12.8	43
83	Actuation by hydrogen electrosorption in hierarchical nanoporous palladium. <i>Philosophical Magazine</i> , 2017, 97, 1571-1587.	1.6	42
84	On the Role of Residual Ag in Nanoporous Au Catalysts for CO Oxidation: A Combined Microreactor and TAP Reactor Study. <i>ChemCatChem</i> , 2012, 4, 251-259.	3.7	40
85	A comparative study of alcohol oxidation over nanoporous gold in gas and liquid phase. <i>Journal of Catalysis</i> , 2017, 353, 99-106.	6.2	40
86	Electrically Tunable Nanoporous Carbon Hybrid Actuators. <i>Advanced Functional Materials</i> , 2012, 22, 3029-3034.	14.9	39
87	Dynamic electro-chemo-mechanical analysis during cyclic voltammetry. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 17313.	2.8	38
88	Instabilities of core-shell heterostructured cylinders due to diffusions and epitaxy: Spheroidization and blossom of nanowires. <i>Journal of the Mechanics and Physics of Solids</i> , 2008, 56, 1831-1851.	4.8	37
89	Kinematics of polycrystal deformation by grain boundary sliding. <i>Acta Materialia</i> , 2011, 59, 4366-4377.	7.9	37
90	Crack Mitigation during Dealloying of Au <sub>25</sub> C <sub>75</sub> . <i>Advanced Engineering Materials</i> , 2014, 16, 389-398.	3.5	37

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91	Some basic notions on nanostructured solids. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1994, 179-180, 102-107.	5.6	36
92	Dynamic studies of CO oxidation on nanoporous Au using a TAP reactor. <i>Journal of Catalysis</i> , 2011, 278, 219-227.	6.2	36
93	Topology evolution during coarsening of nanoscale metal network structures. <i>Physical Review Materials</i> , 2019, 3, .	2.4	36
94	Wrinkling of Atomic Planes in Ultrathin Au Nanowires. <i>Nano Letters</i> , 2014, 14, 4859-4866.	9.1	35
95	Small-angle neutron scattering by the magnetic microstructure of nanocrystalline ferromagnets near saturation. <i>Journal of Research of the National Institute of Standards and Technology</i> , 1999, 104, 261.	1.2	35
96	Exchange-stiffness constant in cold-worked and nanocrystalline Ni measured by elastic small-angle neutron scattering. <i>Journal of Applied Physics</i> , 2000, 87, 5953-5955.	2.5	34
97	Response of the potential of a gold electrode to elastic strain. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 9008.	2.8	34
98	Adsorption-driven tuning of the electrical resistance of nanoporous gold. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	34
99	Ab initio investigation of surface stress response to charging of transition and noble metals. <i>Physical Review B</i> , 2012, 85, .	3.2	34
100	Mössbauer and magnetic studies of $\text{MFe}_2\text{O}_4$ ( $\text{M} = \text{Co, Ni}$ ) nanoparticles. <i>Hyperfine Interactions</i> , 2007, 165, 153-159.	0.5	33
101	Surface excess elasticity of gold: Ab initio coefficients and impact on the effective elastic response of nanowires. <i>Acta Materialia</i> , 2017, 124, 468-477.	7.9	32
102	Mechanics of corrugated surfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 2010, 58, 1552-1566.	4.8	31
103	Different measures for the capillarity-driven deformation of a nanoporous metal. <i>Europhysics Letters</i> , 2010, 89, 66001.	2.0	31
104	Impact of surface mechanics on the reactivity of electrodes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 2114-2117.	2.8	31
105	Electrocapillary coupling coefficients for hydrogen electrosorption on palladium. <i>Acta Materialia</i> , 2013, 61, 6301-6309.	7.9	31
106	Local structure and size effects in nanophase palladium: An X-ray absorption study. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1995, 207, 397-403.	2.1	30
107	Fast and Reversible Actuation of Metallic Muscles Composed of Nickel Nanowire Forest. <i>Advanced Materials</i> , 2016, 28, 5315-5321.	21.0	30
108	A nanoporous gold-polypyrrole hybrid nanomaterial for actuation. <i>Sensors and Actuators B: Chemical</i> , 2017, 248, 622-629.	7.8	30

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109	Measuring the exchange-stiffness constant of nanocrystalline solids by elastic small-angle neutron scattering. Philosophical Magazine Letters, 2000, 80, 785-792.	1.2	29
110	Electrocapillary Coupling during Electrosorption. Langmuir, 2014, 30, 10522-10530.	3.5	29
111	Mössbauer Study of Nanocrystalline $\mu\text{-Fe}_3\text{-xCoxN}$ System. Hyperfine Interactions, 2004, 156/157, 51-56.	0.5	28
112	Dipolar correlations in a nanocomposite: A neutron scattering study of NanopermFe89Zr7B3Cu. Physical Review B, 2006, 74, .	3.2	28
113	Electrochemical Modulation of Photonic Metamaterials. Advanced Materials, 2010, 22, 5173-5177.	21.0	28
114	Electrochemical tuning of the optical properties of nanoporous gold. Scientific Reports, 2017, 7, 44139.	3.3	28
115	Determination of local structure in nanophase palladium by x-ray-absorption spectroscopy. Physical Review B, 1998, 57, 3365-3374.	3.2	27
116	Kinetics of gallium films confined at grain boundaries. Physical Review B, 1998, 58, 2142-2149.	3.2	27
117	Tuneable magnetic susceptibility of nanocrystalline palladium. Applied Physics Letters, 2006, 88, 253103.	3.3	27
118	Effective medium model for the spectral properties of nanoporous gold in the visible. Applied Physics Letters, 2014, 105, .	3.3	27
119	Domain formation and long-range spin disorder in Vitroperm. Europhysics Letters, 2003, 64, 43-49.	2.0	26
120	Less Noble or More Noble: How Strain Affects the Binding of Oxygen on Gold. Angewandte Chemie - International Edition, 2015, 54, 12981-12985.	13.8	26
121	Surface-to-Volume Ratio Drives Photoelectron Injection from Nanoscale Gold into Electrolyte. ACS Catalysis, 2019, 9, 3366-3374.	11.2	26
122	Phase equilibria and phase diagrams of nanoscaled systems. Journal of Alloys and Compounds, 2007, 434-435, 286-289.	5.5	25
123	Reversible relaxation at charged metal surfaces: An ab initio study. Europhysics Letters, 2008, 84, 13002.	2.0	25
124	On the origin of the anomalous compliance of dealloying-derived nanoporous gold. Scripta Materialia, 2017, 130, 74-77.	5.2	25
125	Characterization of nanocrystalline palladium by x-ray atomic density distribution functions. Scripta Materialia, 1995, 6, 567-570.	0.5	24
126	Ordered arrays of highly oriented single-crystal semiconductor nanoparticles on silicon substrates. Nanotechnology, 2005, 16, 1892-1898.	2.6	24



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127	Charge-Dependent Magnetization in Nanoporous Pd-Co Alloys. IEEE Transactions on Magnetism, 2006, 42, 3617-3619.	2.1	24
128	Short-range disordered Si <sub>1-x</sub> Au <sub>x</sub> alloy - evidence for a new phase?. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 145, 130-136.	2.1	23
129	A study of amorphous Fe <sub>79</sub> B <sub>21</sub> alloy powders produced by chemical reduction. Journal of Non-Crystalline Solids, 1990, 116, 247-252.	3.1	23
130	On factors defining the mechanical behavior of nanoporous gold. Acta Materialia, 2021, 215, 116979.	7.9	21
131	Nanoporous Copper-Nickel – Macroscopic bodies of a strong and deformable nanoporous base metal by dealloying. Scripta Materialia, 2018, 155, 119-123.	5.2	20
132	Effect of La, B doping on the electrical resistivity and magnetic susceptibility of nanocrystalline vanadium nitride. Journal of Applied Physics, 2004, 96, 688-695.	2.5	19
133	Electrocapillary coupling at rough surfaces. Physical Chemistry Chemical Physics, 2015, 17, 11725-11731.	2.8	19
134	Synthesis of uniform bulk nanoporous palladium with tunable structure. Electrochimica Acta, 2018, 285, 60-69.	5.2	19
135	Reduced short-range order in amorphous silicon-gold alloys. Journal of Non-Crystalline Solids, 1992, 142, 70-80.	3.1	18
136	In vacuo X-ray diffraction study of atomic short-range order in inert-gas-condensed Fe. Scripta Materialia, 1995, 6, 593-596.	0.5	18
137	Spin-glass-like transition in interacting MnFe <sub>2</sub> O <sub>4</sub> nanoparticles. Physica Status Solidi (B): Basic Research, 2004, 241, 1589-1592.	1.5	18
138	Elastocapillarity in nanopores: Sorption strain from the actions of surface tension and surface stress. Physical Review Materials, 2018, 2, .	2.4	18
139	Characteristic magnetic length-scales in Vitroperm - Combining Kerr microscopy and small-angle neutron scattering. Physica Status Solidi A, 2004, 201, 3354-3360.	1.7	17
140	Work hardening and inherent plastic instability of nanocrystalline metals. Physica Status Solidi - Rapid Research Letters, 2010, 4, 130-132.	2.4	17
141	Semioordered Hierarchical Metallic Network for Fast and Large Charge-Induced Strain. Nano Letters, 2017, 17, 4774-4780.	9.1	17
142	Microstrain in nanocrystalline solids under load by virtual diffraction. Europhysics Letters, 2010, 89, 66002.	2.0	16
143	Verifying Larché's Cahn elasticity, a milestone of 20th-century thermodynamics. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10914-10919.	7.1	16
144	Stress-charge coupling coefficient for thin-film polypyrrole actuators – Investigation of capacitive ion exchange in the oxidized state. Electrochimica Acta, 2019, 318, 504-512.	5.2	16

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145	Grain rotation by dislocation climb in a finite-size grain boundary. <i>Acta Materialia</i> , 2012, 60, 7064-7077.	7.9	15
146	Electrochemically Tunable Resistance of Nanoporous Platinum Produced by Dealloying. <i>Langmuir</i> , 2016, 32, 7757-7764.	3.5	15
147	Nanoporous Gold-Polypyrrole Hybrid Materials for Millimeter-Sized Free Standing Actuators. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001415.	3.7	15
148	X-ray studies of nanoporous gold: Powder diffraction by large crystals with small holes. <i>Physical Review Materials</i> , 2017, 1, .	2.4	15
149	Micromagnetic structures of nanocrystalline ferromagnetic materials - comparison of simulation and experiment. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2008, 205, 1774-1778.	1.8	14
150	Mass Transport in Porous Electrodes Studied by Scanning Electrochemical Microscopy: Example of Nanoporous Gold. <i>ChemElectroChem</i> , 2019, 6, 3160-3166.	3.4	14
151	Promoting Effect of the Residual Silver on the Electrocatalytic Oxidation of Methanol and Its Intermediates on Nanoporous Gold. <i>ACS Catalysis</i> , 2022, 12, 4415-4429.	11.2	14
152	Dipole-field-induced spin disorder in a nanocomposite soft magnet. <i>Europhysics Letters</i> , 2005, 72, 249-255.	2.0	13
153	Line stress of step edges at crystal surfaces. <i>Surface Science</i> , 2011, 605, 947-957.	1.9	13
154	Inelastic neutron scattering study of hydrogen in nanocrystalline Pd. <i>Scripta Materialia</i> , 1995, 6, 555-558.	0.5	12
155	Mobility of Ga confined in nanostructured alumina. <i>Physica B: Condensed Matter</i> , 1997, 234-236, 173-174.	2.7	12
156	Measurement of a Magnetic-Field Dependent Correlation Length in Nanocrystalline Ni Using Small-Angle Neutron Scattering. <i>Physica Status Solidi A</i> , 2002, 189, 509-513.	1.7	12
157	Sign-inversion of charging-induced variation of electrical resistance of nanoporous platinum. <i>Journal of Applied Physics</i> , 2012, 112, .	2.5	12
158	Surface-driven actuation: Sign reversal under load and surface load-memory effect. <i>Physical Review Materials</i> , 2019, 3, .	2.4	12
159	A lower bound for the volume-averaged mean-square magnetostatic stray field. <i>European Physical Journal B</i> , 2002, 29, 533-540.	1.5	11
160	HRTEM observation of misfit dislocations at non-faceted Al-Pb interfaces. <i>Philosophical Magazine Letters</i> , 2006, 86, 623-632.	1.2	11
161	Thermally Driven Ag-Au Compositional Changes at the Ligament Surface in Nanoporous Gold: Implications for Electrocatalytic Applications. <i>ACS Applied Nano Materials</i> , 2020, 3, 2197-2206.	5.0	11
162	Nanoporous gold-polypyrrole hybrid electrochemical actuators with tunable elasticity. <i>Acta Materialia</i> , 2021, 212, 116852.	7.9	11

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163	Magnetic properties of mechanically alloyed Fe-Ni-Ag. Scripta Metallurgica Et Materialia, 1995, 33, 1717-1724.	1.0	10
164	Segregation-Induced Instability of Nanocrystalline Line Compounds. Physical Review Letters, 1998, 81, 1114-1117.	7.8	10
165	Comment on "Lattice Contraction and Surface Stress of fcc Nanocrystals". Journal of Physical Chemistry B, 2002, 106, 889-890.	2.6	10
166	Charge induced Variation of the Magnetization in Nanoporous Ni-Pd. Materials Research Society Symposia Proceedings, 2005, 876, 1.	0.1	10
167	Neutron scattering and modeling of dipole-field-induced spin disorder in Nanoperm. Applied Physics Letters, 2005, 87, 202509.	3.3	10
168	Synthesis, Characterization and Magnetic Interactions Study of $\mu$ -Fe <sub>3</sub> N@CrN Nanorods. Journal of Nanoscience and Nanotechnology, 2007, 7, 1836-1840.	0.9	10
169	Electrochemical restructuring of plasmonic metamaterials. Applied Physics Letters, 2011, 98, 013112.	3.3	10
170	Oxygen Adsorption and Low-Temperature CO Oxidation on a Nanoporous Au Catalyst: Reaction Mechanism and Foreign Metal Effects. Topics in Catalysis, 2018, 61, 446-461.	2.8	10
171	Measurement of local crystal lattice strain variations in dealloyed nanoporous gold. Materials Research Letters, 2018, 6, 84-92.	8.7	10
172	Chemo-elastic equilibrium in nanocrystalline Pd-Au-H. Scripta Materialia, 2001, 44, 1899-1903.	5.2	9
173	Small-Angle Neutron Scattering of Nanocrystalline Terbium with Random Paramagnetic Susceptibility. Physical Review Letters, 2008, 100, 227202.	7.8	9
174	On the mechanism of electrochemical modulation of plasmonic resonances. Applied Physics Letters, 2012, 101, .	3.3	9
175	Adsorption "strain coupling at solid surfaces. Current Opinion in Chemical Engineering, 2019, 24, 45-53.	7.8	9
176	Evolution of length scales and of chemical heterogeneity during primary and secondary dealloying. Acta Materialia, 2022, 222, 117424.	7.9	9
177	In situ X-ray diffraction study of Co/Pd multilayers grown on Ta substrate during hydrogen loading. Scripta Materialia, 2009, 60, 756-759.	5.2	8
178	Datasets for the microstructure of nanoscale metal network structures and for its evolution during coarsening. Data in Brief, 2020, 29, 105030.	1.0	8
179	Determination of localized state distributions in amorphous semiconductors from excess charge carrier thermalization. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1985, 51, 349-361.	0.6	7
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