

# Mohammad Reza Mohammadizadeh

## List of Publications by Year in descending order

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257357

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96  
all docs

96  
docs citations

96  
times ranked

2776  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advances in the potential applications of bioinspired superhydrophobic materials. Journal of Materials Chemistry A, 2014, 2, 16319-16359.	5.2	490
2	Superhydrophobic Surfaces by Electrochemical Processes. Advanced Materials, 2013, 25, 1378-1394.	11.1	395
3	Superhydrophobic Fiber Mats by Electrodeposition of Fluorinated Poly(3,4-ethyleneoxythiathophene). Journal of the American Chemical Society, 2011, 133, 15627-15634.	6.6	121
4	First-principles elastic and thermal properties of $\text{TiO}_2$ : a phonon approach. Journal of Physics Condensed Matter, 2010, 22, 015401.	0.7	71
5	Superhydrophilicity of $\text{TiO}_2$ thin films using $\text{TiCl}_4$ as a precursor. Materials Research Bulletin, 2008, 43, 522-530.	2.7	57
6	Spontaneous, Phase-Separation Induced Surface Roughness: A New Method to Design Parahydrophobic Polymer Coatings with Rose Petal-like Morphology. ACS Applied Materials & Interfaces, 2016, 8, 3063-3071.	4.0	45
7	The effect of $\text{TiO}_2$ doping on the structure and magnetic and magnetotransport properties of $\text{La}_{0.75}\text{Sr}_{0.25}\text{MnO}_3$ composite. Journal of Applied Physics, 2005, 98, 043908.	1.1	44
8	A template-free approach to nanotube-decorated polymer surfaces using 3,4-phenylenedioxythiophene (PhEDOT) monomers. Journal of Materials Chemistry A, 2016, 4, 17308-17323.	5.2	44
9	Fluorophobic Effect for Building up the Surface Morphology of Electrodeposited Substituted Conductive Polymers. Langmuir, 2009, 25, 5463-5466.	1.6	42
10	Magnetoresistance in $\text{Gd}(\text{Ba}_{2-x}\text{Pr}_x)\text{Cu}_3\text{O}_7$ system. Physica C: Superconductivity and Its Applications, 2003, 390, 134-142.	0.6	41
11	First-principles study of lattice dynamics of $\text{TiO}_2$ brookite and cotunnite structures. Physical Review B, 2011, 83, .	1.1	39
12	Photocatalytic and superhydrophilicity properties of N-doped $\text{TiO}_2$ nanothin films. Applied Surface Science, 2011, 257, 7179-7183.	3.1	39
13	Thermally activated flux creep in the $\text{Gd}(\text{Ba}_{2-x}\text{Pr}_x)\text{Cu}_3\text{O}_7$ system. Superconductor Science and Technology, 2003, 16, 538-544.	1.8	38
14	Influence of intrinsic oleophobicity and surface structuration on the superoleophobic properties of PEDOP films bearing two fluorinated tails. Journal of Materials Chemistry A, 2013, 1, 2896.	5.2	37
15	Photocatalytic activity of $\text{TiO}_2$ thin films by hydrogen DC plasma. Applied Surface Science, 2015, 350, 43-49.	3.1	37
16	Specific Heat Capacity of $\text{TiO}_2$ Nanoparticles. Journal of Computational and Theoretical Nanoscience, 2012, 9, 616-620.	0.4	36
17	One-Step and Templateless Electropolymerization Process Using Thienothiophene Derivatives To Develop Arrays of Nanotubes and Tree-like Structures with High Water Adhesion. ACS Applied Materials & Interfaces, 2016, 8, 22732-22743.	4.0	36
18	Pr at Gd or Ba site in $\text{GdBa}_2\text{Cu}_3\text{O}_7$ : Appearance of superconductivity. Physical Review B, 2003, 68, .	1.1	34

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19	Normal state conduction in Gd(Ba <sub>2-x</sub> Pr <sub>x</sub> )Cu <sub>3</sub> O <sub>7</sub> ?. European Physical Journal B, 2003, 33, 381-390.	0.6	31
20	Simultaneous improvement of photocatalytic and superhydrophilicity properties of nano TiO <sub>2</sub> thin films. Chemical Engineering Research and Design, 2012, 90, 1473-1479.	2.7	30
21	Quantum Monte Carlo study of high-pressure cubic TiO <sub>2</sub> . Applied Physics Letters, 2012, 100, 261902.	1.5	26
22	Ab Initio Simulation of the Effects of Hydrogen Concentration on Anatase TiO <sub>2</sub> . Journal of Physical Chemistry C, 2016, 120, 8421-8427.	1.5	26
23	Influence of the monomer structure and electrochemical parameters on the formation of nanotubes with parahydrophobic properties (high water adhesion) by a templateless electropolymerization process. Journal of Colloid and Interface Science, 2016, 466, 413-424.	5.0	26
24	Electrodeposition of Polypyrenes with Tunable Hydrophobicity, Water Adhesion, and Fluorescence Properties. Journal of Physical Chemistry C, 2016, 120, 7077-7087.	1.5	24
25	Roughness dependent wettability of sputtered copper thin films: The effect of the local surface slope. Journal of Applied Physics, 2019, 125, .	1.1	24
26	Superhydrophilicity and photocatalytic enhancement of titania nano thin films. Applied Surface Science, 2011, 257, 3780-3785.	3.1	23
27	Superhydrophilicity and photocatalytic activity of sol-gel deposited nanosized titania thin films. Thin Solid Films, 2011, 519, 6432-6437.	0.8	23
28	3,4-Ethylenedioxy pyrrole (EDOP) Monomers with Aromatic Substituents for Parahydrophobic Surfaces by Electropolymerization. Macromolecules, 2015, 48, 5188-5195.	2.2	23
29	Excitonic effects in the optical properties of hydrogenated anatase TiO <sub>2</sub> . Physical Review B, 2017, 95, .	1.1	23
30	The effect of heat treatment on superhydrophilicity of TiO <sub>2</sub> nano thin films. EPJ Applied Physics, 2007, 40, 155-162.	0.3	22
31	Ab-initio study of hydrogen doping and oxygen vacancy at anatase TiO <sub>2</sub> surface. AIP Advances, 2014, 4, 027129.	0.6	22
32	Mis-substitution effect in Gd <sub>1-x</sub> Pr <sub>x</sub> Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> system. Physica B: Condensed Matter, 2002, 321, 301-304.	1.3	21
33	Structural and electronic properties of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> under high pressures. Physica C: Superconductivity and Its Applications, 2002, 370, 85-93.	0.6	21
34	Two dimensionality aspects of HTSC. Superconductor Science and Technology, 2003, 16, 1216-1223.	1.8	21
35	First principles study of hydrogen doping in anatase TiO <sub>2</sub> . EPJ Applied Physics, 2014, 67, 30401.	0.3	20
36	Staudinger Vilarassa reaction: A powerful tool for surface modification and superhydrophobic properties. Journal of Colloid and Interface Science, 2015, 457, 72-77.	5.0	20

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37	Pseudogap in Gd-based 123 HTSC. <i>Physica B: Condensed Matter</i> , 2003, 336, 410-419.	1.3	19
38	Low bioaccumulative materials for parahydrophobic nanosheets with sticking behaviour. <i>Journal of Colloid and Interface Science</i> , 2015, 447, 167-172.	5.0	19
39	Designing Nanoporous Membranes through Templateless Electropolymerization of Thieno[3,4- <i>b</i> ]thiophene Derivatives with High Water Content. <i>ACS Omega</i> , 2019, 4, 13080-13085.	1.6	19
40	Hydrophobic Cu <sub>2</sub> O surfaces prepared by chemical bath deposition method. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	19
41	Electrodeposited Poly(thieno[3,2- <i>b</i> ]thiophene) Films for the Templateless Formation of Porous Structures by Galvanostatic and Pulse Deposition. <i>ChemPlusChem</i> , 2017, 82, 1351-1358.	1.3	18
42	Influence of Temperature on TiO <sub>2</sub> Nanoparticles. <i>Current Nanoscience</i> , 2008, 4, 151-156.	0.7	17
43	Nanocups and hollow microspheres formed by a one-step and templateless electropolymerization of thieno[3,4- <i>b</i> ]thiophene derivatives as a function of the substituent. <i>Electrochimica Acta</i> , 2018, 269, 462-478.	2.6	17
44	Roughness-dependent wetting behavior of vapor-deposited metallic thin films. <i>Physical Review E</i> , 2019, 100, 022804.	0.8	17
45	Superhydrophobic properties of electrodeposited fluorinated polypyrenes. <i>Journal of Fluorine Chemistry</i> , 2017, 193, 73-81.	0.9	16
46	Intrinsically water-repellent copper oxide surfaces; An electro-crystallization approach. <i>Applied Surface Science</i> , 2018, 443, 191-197.	3.1	15
47	The influence of bath temperature on the one-step electrodeposition of non-wetting copper oxide coatings. <i>Applied Surface Science</i> , 2020, 503, 144094.	3.1	15
48	Structural and electronic properties of ultra-small radius SWCNT. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 31, 31-37.	1.3	14
49	Structural, electronic, and dynamical properties of Pca <sub>21</sub> -TiO <sub>2</sub> by first principles. <i>Europhysics Letters</i> , 2012, 97, 56003.	0.7	14
50	Charge density distribution with pressure in Y-123. <i>Physica B: Condensed Matter</i> , 2002, 321, 360-364.	1.3	13
51	N-doped TiO <sub>2</sub> nanothin films: photocatalytic and hydrophilicity properties. <i>EPJ Applied Physics</i> , 2013, 61, 10303.	0.3	13
52	Wetting Transition from Hydrophilic to Superhydrophobic over Dendrite Copper Leaves Grown on Steel Meshes. <i>Journal of Bionic Engineering</i> , 2019, 16, 719-729.	2.7	12
53	Nanotubular structures through templateless electropolymerization using thieno[3,4- <i>b</i> ]thiophene derivatives with different substituents and water content. <i>Electrochimica Acta</i> , 2019, 320, 134594.	2.6	12
54	Different self-consistent electronic structures of $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \rangle \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:mrow} \langle \text{mml:mtext} \rangle \text{PrBa} \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mtext} \rangle \langle \text{mml:mrow} \langle \text{mml:mtext} \rangle \langle \text{mml:mtext} \rangle \text{LSDA} \langle \text{mml:mtext} \rangle \langle \text{mml:m} \rangle$ . <i>Physical Review B</i> , 2008, 78, .		

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55	Nanostructured superhydrophobic films synthesized by electrodeposition of fluorinated polyindoles. Beilstein Journal of Nanotechnology, 2015, 6, 2078-2087.	1.5	11
56	Structural and electronic properties of hydrogen doped Wurtzite ZnO. Computational Materials Science, 2018, 143, 232-239.	1.4	11
57	Fabrication of Superhydrophobic Hierarchical Surfaces by Square Pulse Electrodeposition: Copper-Based Layers on Gold/Silicon (100) Substrates. ChemPlusChem, 2019, 84, 368-373.	1.3	11
58	Superhydrophobic and fluorescent properties of fluorinated polypyrene surfaces using various polar linkers prepared via electropolymerization. Reactive and Functional Polymers, 2019, 135, 65-76.	2.0	11
59	Flux dynamics, superconducting, and normal state properties of Gd(Ba <sub>1-x</sub> Pr <sub>x</sub> ) <sub>2</sub> ETQq1 1 0.784314 rgBT /Overlock 10 321-336.	0.6	10
60	Electric field gradients in PrBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> : LSDA+U results and comparison with experiment. European Physical Journal B, 2008, 61, 309-318.	0.6	10
61	Templateless electrodeposition of conducting polymer nanotubes on mesh substrates for high water adhesion. Nano Structures Nano Objects, 2016, 7, 64-68.	1.9	10
62	Experimental Characterization of Droplet Adhesion: The Ejection Test Method (ETM) Applied to Surfaces with Various Hydrophobicity. Journal of Physical Chemistry A, 2018, 122, 8693-8700.	1.1	8
63	Influence of substrate on the hydrophilicity and photocatalytic properties of TiO <sub>2</sub> nano-layers. Physica Scripta, 2013, 88, 025604.	1.2	7
64	Effect of Oxygen Pressure on the Surface Roughness and Intergranular Behavior of YBCO Thin Films. Journal of Superconductivity and Novel Magnetism, 2016, 29, 1483-1489.	0.8	7
65	Optical and electronic properties of H-doped ZnO. Optical and Quantum Electronics, 2016, 48, 1.	1.5	7
66	Flux pinning enhancement in thin films of $Y_{1-x}B_x$	0.6	7
67	Designing bio-inspired coral-like structures using a templateless electropolymerization approach with a high water content. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20190123.	1.6	7
68	Charge Transfer in YBCO Under Pressure with Bond Valence Sum Approach. Journal of Superconductivity and Novel Magnetism, 2005, 18, 299-307.	0.5	6
69	The effects of Pr at R and Ba sites on the electronic structure of RBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> . Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3122-3125.	0.8	6
70	First-principles insights into role of hydrogen atom in black titania. Computational Materials Science, 2017, 139, 84-88.	1.4	6
71	High temperature superconducting YBCO microwave filters. Physica C: Superconductivity and Its Applications, 2018, 549, 22-26.	0.6	6
72	Electron-phonon interaction in $TiO_2$ using first-principles calculations. Physical Review B, 2021, 104, .	0.6	6

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73	Hydrogen irradiation on TiO <sub>2</sub> nano-thin films. Applied Physics A: Materials Science and Processing, 2015, 121, 149-156.	1.1	5
74	Synthesis and effectiveness of Cu-infused TiO <sub>2</sub> -SiO <sub>2</sub> based self-cleaning and antibacterial thin-films coating on ceramic tiles. Journal of Sol-Gel Science and Technology, 2022, 103, 396-404.	1.1	5
75	Superconductivity in an ultra-small radius SWCNT. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3126-3129.	0.8	4
76	The bipolaron model in the normal state of Pr-doped GdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> superconductors. Superconductor Science and Technology, 2010, 23, 045003.	1.8	4
77	Ab-initio study of electronic and elastic properties of Mg(BH <sub>4</sub> )(NH <sub>2</sub> ) complex hydride. International Journal of Hydrogen Energy, 2018, 43, 1587-1595.	3.8	3
78	Effects of various types of hydrogen dopants on optical properties of ZnO. Optik, 2019, 187, 117-123.	1.4	3
79	Fabrication of YBCO Thin Films by Fluorine-Free MOCSD Method: Influence of Sintering Near the Melting Point. IEEE Transactions on Applied Superconductivity, 2020, 30, 1-8.	1.1	3
80	Modification of stainless steel by Cu <sub>2</sub> O coating for hydrophobic applications: a morphological study. Surface Topography: Metrology and Properties, 2020, 8, 025014.	0.9	3
81	Fluctuation Conductivity in MOD-Derived YBCO Thin Films. Journal of Superconductivity and Novel Magnetism, 2021, 34, 705-713.	0.8	3
82	Y <sub>3</sub> Ba <sub>5</sub> Cu <sub>8</sub> O <sub>x</sub> Superconductor Under Hydrostatic Pressure. Journal of Low Temperature Physics, 2021, 203, 309-318.	0.6	3
83	Deposition of Superhydrophobic Fatty Acid-Coated Al <sub>2</sub> O <sub>3</sub> Films by Spray Pyrolysis Method: Effect of Dispersion Mediums on Morphology and Roughness of the Layer. Protection of Metals and Physical Chemistry of Surfaces, 2021, 57, 335-343.	0.3	2
84	Tunable Nanoporous Structures with Rose Petal Effect by Soft Template Electropolymerization of Benzotrithiophene Monomers. ChemistrySelect, 2022, 7, .	0.7	2
85	Conduction mechanism in Pr-doped GdBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> . Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1851-1854.	0.8	1
86	Effects of Pr doping and magnetic field on vortex pinning in Gd-123 based HTSC. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1883-1886.	0.8	1
87	Magnetic field effects on electrical resistivity of (Gd <sub>1-x</sub> Pr <sub>x</sub> )Ba <sub>2</sub> Cu <sub>3</sub> O <sub>7-<math>\delta</math></sub> and Gd(Ba <sub>2-x</sub> Pr <sub>x</sub> )Cu <sub>3</sub> O <sub>7+<math>\delta</math></sub> . Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1887-1890.	0.8	1
88	Simulation of YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7</sub> /MgO surface growth. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 3118-3121.	0.8	1
89	Bioinspired surfaces with strong water adhesion by electropolymerization of thieno[3,4-b]thiophene with mixed hydrocarbon/short fluorocarbon chains. Journal of Fluorine Chemistry, 2020, 236, 109574.	0.9	1
90	Variable range hopping conduction mechanisms in reduced rutile TiO <sub>2</sub> . Physica Scripta, 2022, 97, 045408.	1.2	1

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91	High temperature superconductors as a two-dimensional electron gas. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1828-1831.	0.8	0
92	Appearance of a new superconducting phase in $Gd(Ba_{2-x}Pr_x)Cu_3O_{7-\delta}$ . Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 1879-1882.	0.8	0
93	Surface Nanostructure Control with Poly(ethylene glycol) (PEG) Spacer by Templateless Electropolymerization. Journal of Bionic Engineering, 2021, 18, 65-76.	2.7	0
94	Electron-Phonon Coupling Constant of Uranium and Lutetium. Journal of Superconductivity and Novel Magnetism, 0, , .	0.8	0
95	Tuning memristance and transport properties of $TiO_2$ by oxygen vacancy concentration. Applied Physics A: Materials Science and Processing, 2022, 128, .	1.1	0