

Katarzyna Grochowska

List of Publications by Year in descending order

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Version: 2024-02-01

51
papers

746
citations

516561

16
h-index

610775

24
g-index

53
all docs

53
docs citations

53
times ranked

673
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructure of the laser-modified transition metal nanocomposites for water splitting. <i>Nanotechnology</i> , 2022, , .	1.3	1
2	The Anodization of Thin Titania Layers as a Facile Process towards Semitransparent and Ordered Electrode Material. <i>Nanomaterials</i> , 2022, 12, 1131.	1.9	5
3	A facile method for Tauc exponent and corresponding electronic transitions determination in semiconductors directly from UV-Vis spectroscopy data. <i>Optical Materials</i> , 2022, 127, 112205.	1.7	44
4	Electrocatalytic oxidation of methanol, ethylene glycol and glycerine in alkaline media on TiO ₂ nanotubes decorated with AuCu nanoparticles for an application in fuel cells. <i>Journal of Materials Science</i> , 2022, 57, 13345-13361.	1.7	3
5	Spin crossover and cooperativity in nanocrystalline [Fe(pyrazine)Pt(CN) ₄] thin films deposited by matrix-assisted laser evaporation. <i>Applied Surface Science</i> , 2021, 541, 148419.	3.1	9
6	Spectacular Oxygen Evolution Reaction Enhancement through Laser Processing of the Nickel-Decorated Titania Nanotubes. <i>Advanced Materials Interfaces</i> , 2021, 8, .	1.9	8
7	Laser-assisted approach for improved performance of Au-Ti based glucose sensing electrodes. <i>Applied Surface Science</i> , 2021, 543, 148788.	3.1	10
8	Review on robust laser light interaction with titania – Patterning, crystallisation and ablation processes. <i>Progress in Solid State Chemistry</i> , 2021, 62, 100297.	3.9	8
9	Free-standing TiO ₂ nanotubes decorated with spherical nickel nanoparticles as a cost-efficient electrocatalyst for oxygen evolution reaction. <i>RSC Advances</i> , 2021, 11, 219-228.	1.7	8
10	Electrochemical glucose sensor based on the glucose oxidase entrapped in chitosan immobilized onto laser-processed Au-Ti electrode. <i>Sensors and Actuators B: Chemical</i> , 2021, 330, 129409.	4.0	54
11	Exploring multi-step glucose oxidation kinetics at GOx-functionalized nanotextured gold surfaces with differential impedimetric technique. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 174, 109015.	2.5	10
12	Enzyme Immobilization on Gold Nanoparticles for Electrochemical Glucose Biosensors. <i>Nanomaterials</i> , 2021, 11, 1156.	1.9	24
13	The interaction of the pulsed laser irradiation with titania nanotubes - Theoretical studies on the thermal effect. <i>International Journal of Thermal Sciences</i> , 2021, 162, 106800.	2.6	5
14	Pulsed laser deposition of plasmonic structures in air by irradiation through the substrate. <i>Thin Solid Films</i> , 2021, 734, 138836.	0.8	1
15	Simple synthesis route for fabrication of protective photo-crosslinked poly(zwitterionic) membranes for application in non-enzymatic glucose sensing. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2021, , .	1.6	2
16	Rapid development of the photoresponse and oxygen evolution of TiO ₂ nanotubes sputtered with Cr thin films realized via laser annealing. <i>Journal of Alloys and Compounds</i> , 2021, 877, 160316.	2.8	6
17	Influence of Annealing Atmospheres on Photoelectrochemical Activity of TiO ₂ Nanotubes Modified with AuCu Nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 52967-52977.	4.0	9
18	A Flexible Nafion Coated Enzyme-Free Glucose Sensor Based on Au-Implanted Ti Structures. <i>Electroanalysis</i> , 2020, 32, 323-332.	1.5	21

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19	Scalable Route toward Superior Photoresponse of UV-Laser-Treated TiO ₂ Nanotubes. ACS Applied Materials & Interfaces, 2020, 12, 3225-3235.	4.0	27
20	Laser-assisted modification of titanium dioxide nanotubes in a tilted mode as surface modification and patterning strategy. Applied Surface Science, 2020, 508, 145143.	3.1	24
21	Light-improved glucose sensing on ordered Au-Ti heterostructure. Optik, 2020, 206, 164166.	1.4	3
22	The pulsed laser ablation synthesis of colloidal iron oxide nanoparticles for the enhancement of TiO ₂ nanotubes photo-activity. Applied Surface Science, 2020, 530, 147097.	3.1	20
23	Formation of the hollow nanopillar arrays through the laser-induced transformation of TiO ₂ nanotubes. Scientific Reports, 2020, 10, 20235.	1.6	6
24	Laser induced formation of copper species over TiO ₂ nanotubes towards enhanced water splitting performance. International Journal of Hydrogen Energy, 2020, 45, 19192-19205.	3.8	9
25	Insightful Analysis of Phenomena Arising at the Metal Polymer Interphase of Au-Ti Based Non-Enzymatic Glucose Sensitive Electrodes Covered by Nafion. Coatings, 2020, 10, 810.	1.2	9
26	Laser-Assisted Synthesis and Oxygen Generation of Nickel Nanoparticles. Materials, 2020, 13, 4068.	1.3	4
27	The Effect of Laser Re-Solidification on Microstructure and Photo-Electrochemical Properties of Fe-Decorated TiO ₂ Nanotubes. Materials, 2020, 13, 4019.	1.3	2
28	Anodic titania nanotubes decorated with gold nanoparticles produced by laser-induced dewetting of thin metallic films. Scientific Reports, 2020, 10, 20506.	1.6	12
29	Novel approach to interference analysis of glucose sensing materials coated with Nafion. Bioelectrochemistry, 2020, 135, 107575.	2.4	14
30	Thermally tuneable optical and electrochemical properties of Au-Cu nanomosaic formed over the host titanium dimples. Chemical Engineering Journal, 2020, 399, 125673.	6.6	10
31	The In-Depth Studies of Pulsed UV Laser-Modified TiO ₂ Nanotubes: The Influence of Geometry, Crystallinity, and Processing Parameters. Nanomaterials, 2020, 10, 430.	1.9	12
32	The geometry of free-standing titania nanotubes as a critical factor controlling their optical and photoelectrochemical performance. Surface and Coatings Technology, 2020, 389, 125628.	2.2	22
33	The optimization of enzyme immobilization at Au-Ti nanotextured platform and its impact onto the response towards glucose in neutral media. Materials Research Express, 2019, 6, 1150e3.	0.8	13
34	Non-enzymatic flexible glucose sensing platform based on nanostructured TiO ₂ @ Au composite. Journal of Electroanalytical Chemistry, 2019, 837, 230-239.	1.9	45
35	Ordered titanium templates functionalized by gold films for biosensing applications @ Towards non-enzymatic glucose detection. Talanta, 2017, 166, 207-214.	2.9	20
36	Properties of Thermally Dewetted Thin Au Films on ITO-Coated Glass for Biosensing Applications. Plasmonics, 2017, 12, 1939-1946.	1.8	4

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37	Nanostructuring of thin Au films deposited on ordered Ti templates for applications in SERS. <i>Applied Surface Science</i> , 2017, 418, 472-480.	3.1	17
38	Fabrication and Significant Photoelectrochemical Activity of Titania Nanotubes Modified with Thin Indium Tin Oxide Film. <i>Acta Metallurgica Sinica (English Letters)</i> , 2017, 30, 1210-1220.	1.5	7
39	Properties of ordered titanium templates covered with Au thin films for SERS applications. <i>Applied Surface Science</i> , 2016, 388, 716-722.	3.1	16
40	Nanoporous TiO ₂ electrode grown by laser ablation of titanium in air at atmospheric pressure and room temperature. <i>Thin Solid Films</i> , 2016, 601, 41-44.	0.8	14
41	Semi-transparent ordered TiO ₂ nanostructures prepared by anodization of titanium thin films deposited onto the FTO substrate. <i>Applied Surface Science</i> , 2016, 381, 36-41.	3.1	21
42	Characterization of Ag nanostructures fabricated by laser-induced dewetting of thin films. <i>Applied Surface Science</i> , 2016, 374, 36-41.	3.1	29
43	Properties of an Indium Tin Oxide Electrode Modified by a Laser Nanostructured Thin Au Film for Biosensing. <i>European Journal of Inorganic Chemistry</i> , 2015, 2015, 1275-1281.	1.0	6
44	Thin layer of ordered boron-doped TiO ₂ nanotubes fabricated in a novel type of electrolyte and characterized by remarkably improved photoactivity. <i>Applied Surface Science</i> , 2015, 357, 942-950.	3.1	44
45	fs- and ns-laser processing of polydimethylsiloxane (PDMS) elastomer: Comparative study. <i>Applied Surface Science</i> , 2015, 336, 321-328.	3.1	43
46	Functionalization of indium-tin-oxide electrodes by laser-nanostructured gold thin films for biosensing applications. <i>Applied Surface Science</i> , 2015, 357, 1684-1691.	3.1	14
47	Interfacial Properties of Organic Semiconductor-Inorganic Magnetic Oxide Hybrid Spintronic Systems Fabricated Using Pulsed Laser Deposition. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 22228-22237.	4.0	15
48	Properties of plasmonic arrays produced by pulsed-laser nanostructuring of thin Au films. <i>Beilstein Journal of Nanotechnology</i> , 2014, 5, 2102-2112.	1.5	11
49	Engineering Au Nanoparticle Arrays on SiO ₂ Glass by Pulsed UV Laser Irradiation. <i>Plasmonics</i> , 2013, 8, 105-113.	1.8	16
50	Nanostructuring of thin Au films by means of short UV laser pulses. <i>Opto-electronics Review</i> , 2011, 19, .	2.4	6
51	Optical properties of Au nanostructures obtained by pulsed UV laser irradiation of thin films. <i>Photonics Letters of Poland</i> , 2011, 3, .	0.2	0