

# Gary J Cheng

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

211 papers	5,086 citations	38 h-index	59 g-index
252 ext. papers	6,285 ext. citations	7.5 avg, IF	5.99 L-index

#	Paper	IF	Citations
211	Self-packaged high-resolution liquid metal nano-patterns. <i>Matter</i> , <b>2022</b> ,	12.7	1
210	Understanding the role of monolayer graphene during long range shock strengthening of metal-graphene heterostructure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2022</b> , 837, 142741	5.3	1
209	An Ultrawideband GaAs MMIC Microstrip Directional Coupler With High Directivity and Very Flat Coupling. <i>IEEE Transactions on Microwave Theory and Techniques</i> , <b>2022</b> , 1-1	4.1	1
208	3D-printed hierarchical porous cellulose/alginate/carbon black hydrogel for high-efficiency solar steam generation. <i>Chemical Engineering Journal</i> , <b>2022</b> , 430, 132765	14.7	13
207	Highly sensitive and wide-range flexible pressure sensor based on carbon nanotubes-coated polydimethylsiloxane foam. <i>Materials Letters</i> , <b>2022</b> , 308, 131151	3.3	5
206	High Power 10-18 GHz Monolithic Limiter Based on GaAs p-i-n Technology. <i>IEEE Microwave and Wireless Components Letters</i> , <b>2022</b> , 1-4	2.6	2
205	Nanoalloy libraries from laser-induced thermionic emission reduction.. <i>Science Advances</i> , <b>2022</b> , 8, eabm6541	54.1	1
204	Magnetically Aligned Ultrafine Cobalt Embedded 3D Porous Carbon Metamaterial by One-Step Ultrafast Laser Direct Writing. <i>Advanced Science</i> , <b>2021</b> , e2102477	13.6	3
203	3D MOF Nanoarchitecture Membrane via Ultrafast Laser Nanoforging.. <i>Small Methods</i> , <b>2021</b> , 5, e2100758	2.8	1
202	Liquid metal nanolayer-linked MOF nanocomposites by laser shock evaporation. <i>Matter</i> , <b>2021</b> ,	12.7	1
201	Controlled self-assembly of plasmon-based photonic nanocrystals for high performance photonic technologies. <i>Nano Today</i> , <b>2021</b> , 37, 101072	17.9	17
200	Understanding femtosecond laser internal scribing of diamond by atomic simulation: Phase transition, structure and property. <i>Carbon</i> , <b>2021</b> , 175, 352-363	10.4	5
199	Ultrastrong pure aluminum structure with gradient nanocrystals via selective pulsed laser melting: Computation framework and experiments. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2021</b> , 151, 104391	5.9	2
198	Isolated atomic catalysts encapsulated in MOF for ultrafast water pollutant treatment. <i>Nano Research</i> , <b>2021</b> , 14, 1287-1293	10	6
197	Ultrafast transformation of PbI <sub>2</sub> in two-step fabrication of halide perovskite films for long-term performance and stability via nanosecond laser shock annealing. <i>Journal of Materials Chemistry C</i> , <b>2021</b> , 9, 12819-12827	7.1	1
196	Direct Ink Writing of Hierarchically Porous Cellulose/Alginate Monolithic Hydrogel as a Highly Effective Adsorbent for Environmental Applications. <i>ACS Applied Polymer Materials</i> , <b>2021</b> , 3, 699-709	4.3	14
195	Additive printing of recyclable anti-counterfeiting patterns with sol-gel cellulose nanocrystal inks. <i>Nanoscale</i> , <b>2021</b> , 13, 11808-11816	7.7	5

194	Ultrahigh Sensitivity Flexible Pressure Sensors Based on 3D-Printed Hollow Microstructures for Electronic Skins. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2000984	6.8	9
193	Borophene via Micromechanical Exfoliation. <i>Advanced Materials</i> , <b>2021</b> , 33, e2102039	24	12
192	Ultrastrong medium entropy alloy with simultaneous strength-ductility improvement via heterogeneous nanocrystalline structures. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 823, 141631	5.3	6
191	Ultrafast femtosecond pressure modulation of structure and exciton kinetics in 2D halide perovskites for enhanced light response and stability. <i>Nature Communications</i> , <b>2021</b> , 12, 4879	17.4	8
190	A 3D flexible piezoresistive sensor based on surface-filled graphene nanosheets conductive layer. <i>Sensors and Actuators A: Physical</i> , <b>2021</b> , 332, 113144	3.9	2
189	Silver nanowires interlocked graphene aerogel for ultra-high efficient clearance of oil pollution on water. <i>Sustainable Materials and Technologies</i> , <b>2021</b> , 29, e00285	5.3	0
188	A promising inorganic YFeO <sub>3</sub> pigments with high near-infrared reflectance and infrared emission. <i>Solar Energy</i> , <b>2021</b> , 226, 180-191	6.8	2
187	Soap film inspired mechanical metamaterials approaching theoretical bound of stiffness across full density range. <i>Materials Horizons</i> , <b>2021</b> , 8, 987-996	14.4	6
186	Stable mid-infrared polarization imaging based on quasi-2D tellurium at room temperature. <i>Nature Communications</i> , <b>2020</b> , 11, 2308	17.4	120
185	A Single-Atomic Noble Metal Enclosed Defective MOF via Cryogenic UV Photoreduction for CO Oxidation with Ultrahigh Efficiency and Stability. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 26068-26075	9.5	12
184	A review on microstructures and properties of high entropy alloys manufactured by selective laser melting. <i>International Journal of Extreme Manufacturing</i> , <b>2020</b> , 2, 032003	7.9	24
183	Strain-Engineered Anisotropic Optical and Electrical Properties in 2D Chiral-Chain Tellurium. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002342	24	15
182	Graphene-Metal-Metastructure Monolith via Laser Shock-Induced Thermochemical Stitching of MOF Crystals. <i>Matter</i> , <b>2020</b> , 2, 1535-1549	12.7	22
181	Controllable near-infrared reflectivity and infrared emissivity with substitutional iron-doped orthorhombic YMnO <sub>3</sub> coatings. <i>Solar Energy</i> , <b>2020</b> , 206, 778-786	6.8	7
180	Highly Sensitive Flexible Piezoresistive Sensor with 3D Conductive Network. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 35291-35299	9.5	34
179	Molecular-Scale Nanodiamond with High-Density Color Centers Fabricated from Graphite by Laser Shocking. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100054	6.1	3
178	Ultrahigh electrocatalytic activity with trace amounts of platinum loadings on free-standing mesoporous titanium nitride nanotube arrays for hydrogen evolution reactions. <i>Nanoscale</i> , <b>2020</b> , 12, 15393-15401	7.7	15
177	Overview of Laser Applications in Manufacturing and Materials Processing in Recent Years. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2020</b> , 142,	3.3	10

176	Addressing the Reliability and Electron Transport Kinetics in Halide Perovskite Film via Pulsed Laser Engineering. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1906781	15.6	10
175	Fabrication of 3D polymeric photonic arrays and related applications. <i>Materials Today Chemistry</i> , <b>2020</b> , 15, 100208	6.2	8
174	An Acoustic Meta-Skin Insulator. <i>Advanced Materials</i> , <b>2020</b> , 32, e2002251	24	14
173	Quantum Dot Enabled Perovskite Thin Film with Enhanced Crystallization, Stability, and Carrier Diffusion via Pulsed Laser Nanoengineering. <i>Advanced Materials Interfaces</i> , <b>2020</b> , 7, 2001021	4.6	2
172	Parallel Nanoimprint Forming of One-Dimensional Chiral Semiconductor for Strain-Engineered Optical Properties. <i>Nano-Micro Letters</i> , <b>2020</b> , 12, 160	19.5	2
171	Ultrafast Laser Manufacture of Stable, Efficient Ultrafine Noble Metal Catalysts Mediated with MOF Derived High Density Defective Metal Oxides. <i>Small</i> , <b>2020</b> , 16, e2000749	11	13
170	Photoplastic Transformation Based on Dynamic Covalent Chemistry. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 23623-23631	9.5	12
169	Asymmetric 3D Elastic-Plastic Strain-Modulated Electron Energy Structure in Monolayer Graphene by Laser Shocking. <i>Advanced Materials</i> , <b>2019</b> , 31, e1900597	24	13
168	Scalable Nanoshaping of Hierarchical Metallic Patterns with Multiplex Laser Shock Imprinting Using Soft Optical Disks. <i>Small</i> , <b>2019</b> , 15, e1900481	11	11
167	Artificial control of in-plane anisotropic photoelectricity in monolayer MoS <sub>2</sub> . <i>Applied Materials Today</i> , <b>2019</b> , 15, 203-211	6.6	27
166	Laser-Shock-Induced Nanoscale Kink-Bands in WSe <sub>2</sub> 2D Crystals. <i>ACS Nano</i> , <b>2019</b> , 13, 10587-10595	16.7	6
165	Roll to roll manufacturing of fast charging, mechanically robust 0D/2D nanolayered Si-graphene anode with well-interfaced and defect engineered structures. <i>Energy Storage Materials</i> , <b>2019</b> , 22, 450-460	19.4	22
164	Additive Printed All-Cellulose Membranes with Hierarchical Structure for Highly Efficient Separation of Oil/Water Nanoemulsions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 44375-44382	9.5	28
163	Nanoscale Laser Metallurgy and Patterning in Air Using MOFs. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 5481-5489	16.4	41
162	Pulsed Laser Modulated Shock Transition from Liquid Metal Nanoparticles to Mechanically and Thermally Robust Solid-Liquid Patterns. <i>Advanced Materials</i> , <b>2019</b> , 31, e1807811	24	33
161	Double-negative-index ceramic aerogels for thermal superinsulation. <i>Science</i> , <b>2019</b> , 363, 723-727	33.3	229
160	Laser Shock Tuning Dynamic Interlayer Coupling in Graphene-Boron Nitride Moiré Superlattices. <i>Nano Letters</i> , <b>2019</b> , 19, 283-291	11.5	11
159	Straining effects in MoS monolayer on nanostructured substrates: temperature-dependent photoluminescence and exciton dynamics. <i>Nanoscale</i> , <b>2018</b> , 10, 5717-5724	7.7	38

158	Composite bending-dominated hollow nanolattices: A stiff, cyclable mechanical metamaterial. <i>Materials Today</i> , <b>2018</b> , 21, 467-474	21.8	15
157	Ultrafast Laser-Shock-Induced Confined Metaphase Transformation for Direct Writing of Black Phosphorus Thin Films. <i>Advanced Materials</i> , <b>2018</b> , 30, 1704405	24	12
156	Alpha Lead Oxide (PbO): A New 2D Material with Visible Light Sensitivity. <i>Small</i> , <b>2018</b> , 14, e1703346	11	35
155	Large-Area Direct Laser-Shock Imprinting of a 3D Biomimic Hierarchical Metal Surface for Triboelectric Nanogenerators. <i>Advanced Materials</i> , <b>2018</b> , 30, 1705840	24	70
154	Shock engineering the additive manufactured graphene-metal nanocomposite with high density nanotwins and dislocations for ultra-stable mechanical properties. <i>Acta Materialia</i> , <b>2018</b> , 150, 360-372	8.4	55
153	Laser Sintering of Liquid Metal Nanoparticles for Scalable Manufacturing of Soft and Flexible Electronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 28232-28241	9.5	104
152	Molten salt synthesis of YMnO <sub>3</sub> powder with high near-infrared reflectivity. <i>Materials Letters</i> , <b>2018</b> , 229, 171-173	3.3	7
151	Ultrastrong nanocrystalline stainless steel and its Hall-Petch relationship in the nanoscale. <i>Scripta Materialia</i> , <b>2018</b> , 155, 26-31	5.6	33
150	Dry Etching with Nanoparticles: Formation of High Aspect-Ratio Pores and Channels Using Magnetic Gold Nanoclusters. <i>Advanced Materials</i> , <b>2018</b> , 30, 1703091	24	8
149	Enhancement of osteoblast activity on nanostructured NiTi/hydroxyapatite coatings on additive manufactured NiTi metal implants by nanosecond pulsed laser sintering. <i>International Journal of Nanomedicine</i> , <b>2018</b> , 13, 8217-8230	7.3	11
148	Optoelectronic performance enhancement in pulsed laser deposited gallium-doped zinc oxide (GZO) films after UV laser crystallization. <i>Applied Physics A: Materials Science and Processing</i> , <b>2018</b> , 124, 1	2.6	4
147	Tunable random lasing behavior in plasmonic nanostructures. <i>Nano Convergence</i> , <b>2017</b> , 4, 1	9.2	31
146	Flyweight, Superelastic, Electrically Conductive, and Flame-Retardant 3D Multi-Nanolayer Graphene/Ceramic Metamaterial. <i>Advanced Materials</i> , <b>2017</b> , 29, 1605506	24	55
145	In vitro osteoblast gene expression and differentiation atop of titanium blocks laser coated with multilayer biphasic calcium phosphate/titanium nanocomposites. <i>Biomedical Physics and Engineering Express</i> , <b>2017</b> , 3, 025022	1.5	
144	Defects Mediated Corrosion in Graphene Coating Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 11902-11908	9.5	34
143	Lasing behavior of surface functionalized carbon quantum dot/RhB composites. <i>Nanoscale</i> , <b>2017</b> , 9, 5049-5054	7.7	21
142	Laser additive manufacturing bulk graphene-copper nanocomposites. <i>Nanotechnology</i> , <b>2017</b> , 28, 445705	3.4	22
141	Graphene/PbS-Quantum Dots/Graphene Sandwich Structures Enabled by Laser Shock Imprinting for High Performance Photodetectors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 44715-44723	9.5	36

140	A reusable laser wrapped graphene-Ag array based SERS sensor for trace detection of genomic DNA methylation. <i>Biosensors and Bioelectronics</i> , <b>2017</b> , 92, 755-762	11.8	53
139	[INVITED] A review: Warm laser shock peening and related laser processing technique. <i>Optics and Laser Technology</i> , <b>2016</b> , 78, 15-24	4.2	66
138	Superplastic Formation of Metal Nanostructure Arrays with Ultrafine Gaps. <i>Advanced Materials</i> , <b>2016</b> , 28, 9152-9162	24	15
137	Controlled and Stabilized Light-Matter Interaction in Graphene: Plasmonic Film with Large-Scale 10-nm Lithography. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 1811-1823	8.1	13
136	Parallel Nanoshaping of Brittle Semiconductor Nanowires for Strained Electronics. <i>Nano Letters</i> , <b>2016</b> , 16, 7536-7544	11.5	15
135	Enhanced thermoelectric performance of P-type Bi <sub>2</sub> Sb <sub>2</sub> Te <sub>3</sub> nanowires with pulsed laser assisted electrochemical deposition. <i>Extreme Mechanics Letters</i> , <b>2016</b> , 9, 386-396	3.9	5
134	Fluorescence Lifetime Imaging of Nanoflares for mRNA Detection in Living Cells. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 1979-83	7.8	27
133	Spectral plasmonic effect in the nano-cavity of dye-doped nanosphere-based photonic crystals. <i>Nanotechnology</i> , <b>2016</b> , 27, 165703	3.4	10
132	Laser sintered graphene nickel nanocomposites. <i>Journal of Materials Processing Technology</i> , <b>2016</b> , 231, 143-150	5.3	45
131	Ultrafast direct fabrication of flexible substrate-supported designer plasmonic nanoarrays. <i>Nanoscale</i> , <b>2016</b> , 8, 172-82	7.7	29
130	3D nanostructured inkjet printed graphene via UV-pulsed laser irradiation enables paper-based electronics and electrochemical devices. <i>Nanoscale</i> , <b>2016</b> , 8, 15870-9	7.7	93
129	Three-dimensional-linked carbon fiber-carbon nanotube hybrid structure for enhancing thermal conductivity of silicon carbonitride matrix composites. <i>Carbon</i> , <b>2016</b> , 108, 38-46	10.4	52
128	Observation of Optical and Electrical In-Plane Anisotropy in High-Mobility Few-Layer ZrTe. <i>Nano Letters</i> , <b>2016</b> , 16, 7364-7369	11.5	59
127	Additive roll printing activated cold welding of 2D crystals and 1D nanowires layers for flexible transparent conductor and planer energy storage. <i>Extreme Mechanics Letters</i> , <b>2016</b> , 9, 531-545	3.9	10
126	Mesoporous nitrogen-doped carbon hollow spheres as high-performance anodes for lithium-ion batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 324, 233-238	8.9	87
125	Numerical simulation of temperature field distribution for laser sintering graphene reinforced nickel matrix nanocomposites. <i>Journal of Alloys and Compounds</i> , <b>2016</b> , 688, 438-448	5.7	4
124	Laser Shock-Induced Conformal Transferring of Functional Devices on 3-D Stretchable Substrates. <i>Journal of Microelectromechanical Systems</i> , <b>2015</b> , 24, 414-421	2.5	6
123	Laser direct writing of crystalline Fe <sub>2</sub> O <sub>3</sub> atomic sheets on steel surface in aqueous medium. <i>Applied Surface Science</i> , <b>2015</b> , 351, 148-154	6.7	13

122	Crystalline Nanojoining Silver Nanowire Percolated Networks on Flexible Substrate. <i>ACS Nano</i> , <b>2015</b> , 9, 10018-31	16.7	71
121	Mesoscale elucidation of laser-assisted chemical deposition of Sn nanostructured electrodes. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 214301	2.5	2
120	Preparation and Effect of Lighting on Structures and Properties of GSH Capped ZnSe QDs. <i>Journal of Fluorescence</i> , <b>2015</b> , 25, 1663-9	2.4	4
119	Single-Layer Graphene as a Barrier Layer for Intense UV Laser-Induced Damages for Silver Nanowire Network. <i>ACS Nano</i> , <b>2015</b> , 9, 11121-33	16.7	39
118	Graphene laminated gold bipyramids as sensitive detection platforms for antibiotic molecules. <i>Chemical Communications</i> , <b>2015</b> , 51, 15494-7	5.8	40
117	Crystalline photoactive copper indium diselenide thin films by pulsed laser crystallization of nanoparticle-inks at ambient conditions. <i>RSC Advances</i> , <b>2015</b> , 5, 57550-57558	3.7	4
116	Water flattens graphene wrinkles: laser shock wrapping of graphene onto substrate-supported crystalline plasmonic nanoparticle arrays. <i>Nanoscale</i> , <b>2015</b> , 7, 19885-93	7.7	22
115	Welding of Semiconductor Nanowires by Coupling Laser-Induced Peening and Localized Heating. <i>Scientific Reports</i> , <b>2015</b> , 5, 16052	4.9	7
114	Super-strengthening and stabilizing with carbon nanotube harnessed high density nanotwins in metals by shock loading. <i>Scientific Reports</i> , <b>2015</b> , 5, 15405	4.9	31
113	Large Scale Laser Crystallization of Solution-based Alumina-doped Zinc Oxide (AZO) Nanoinks for Highly Transparent Conductive Electrode. <i>Scientific Reports</i> , <b>2015</b> , 5, 15517	4.9	14
112	Highly transparent conductive electrode with ultra-low HAZE by grain boundary modification of aqueous solution fabricated alumina-doped zinc oxide nanocrystals. <i>APL Materials</i> , <b>2015</b> , 3, 062803	5.7	20
111	Enhanced Multiphoton Emission from CdTe/ZnS Quantum Dots Decorated on Single-Layer Graphene. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 6331-6336	3.8	13
110	Pulse laser deposition fabricated InP/Al-ZnO heterojunction solar cells with efficiency enhanced by an i-ZnO interlayer. <i>Applied Physics A: Materials Science and Processing</i> , <b>2015</b> , 121, 1219-1226	2.6	5
109	3D stereolithography printing of graphene oxide reinforced complex architectures. <i>Nanotechnology</i> , <b>2015</b> , 26, 434003	3.4	131
108	Direct laser writing of nanodiamond films from graphite under ambient conditions. <i>Scientific Reports</i> , <b>2014</b> , 4, 6612	4.9	23
107	Ultrafast and scalable laser liquid synthesis of tin oxide nanotubes and its application in lithium ion batteries. <i>Nanoscale</i> , <b>2014</b> , 6, 5853-8	7.7	33
106	Enhancing photo-induced ultrafast charge transfer across heterojunctions of CdS and laser-sintered TiO <sub>2</sub> nanocrystals. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 10669-78	3.6	10
105	Magnetic field assisted growth of highly dense Fe <sub>2</sub> O <sub>3</sub> single crystal nanosheets and their application in water treatment. <i>RSC Advances</i> , <b>2014</b> , 4, 18621-18626	3.7	14



104	Three-dimensional printing of complex structures: man made or toward nature?. <i>ACS Nano</i> , <b>2014</b> , 8, 9710-9716	6.7	61
103	Precise selective scribing of thin-film solar cells by a picosecond laser. <i>Applied Physics A: Materials Science and Processing</i> , <b>2014</b> , 116, 671-681	2.6	12
102	Single-layer graphene oxide reinforced metal matrix composites by laser sintering: Microstructure and mechanical property enhancement. <i>Acta Materialia</i> , <b>2014</b> , 80, 183-193	8.4	129
101	Ultrahigh dense and gradient nano-precipitates generated by warm laser shock peening for combination of high strength and ductility. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2014</b> , 609, 195-203	5.3	64
100	Control of Ablation Depth and Surface Structure in P3 Scribing of Thin-Film Solar Cells by a Picosecond Laser. <i>Journal of Micro and Nano-Manufacturing</i> , <b>2014</b> , 2,	1.3	2
99	Cryogenic ultrahigh strain rate deformation induced hybrid nanotwinned microstructure for high strength and high ductility. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 213519	2.5	24
98	Development of ZnO-InP heterojunction solar cells for thin film photovoltaics <b>2014</b> ,		2
97	Charge carrier transport and collection enhancement of copper indium diselenide photoactive nanoparticle-ink by laser crystallization. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 111909	3.4	10
96	Nanolithography. Large-scale nanoshaping of ultrasmooth 3D crystalline metallic structures. <i>Science</i> , <b>2014</b> , 346, 1352-6	33.3	113
95	Ultraviolet laser crystallized ZnO:Al films on sapphire with high Hall mobility for simultaneous enhancement of conductivity and transparency. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 201907	3.4	35
94	Laser sintering of separated and uniformly distributed multiwall carbon nanotubes integrated iron nanocomposites. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 113513	2.5	20
93	Transparent and antibacterial Cu <sub>2</sub> Y <sub>2</sub> O <sub>5</sub> thin films by chemical solution deposition. <i>Thin Solid Films</i> , <b>2014</b> , 570, 547-551	2.2	6
92	Pulsed laser induced confined vapor deposition for thin layer of dense nanoparticle arrays on various substrates. <i>Applied Surface Science</i> , <b>2013</b> , 283, 924-929	6.7	7
91	Controlled precipitation by thermal engineered laser shock peening and its effect on dislocation pinning: Multiscale dislocation dynamics simulation and experiments. <i>Acta Materialia</i> , <b>2013</b> , 61, 1957-1967	8.4	34
90	Plasmonic tuning of silver nanowires by laser shock induced lateral compression. <i>Nanoscale</i> , <b>2013</b> , 5, 6311-7	7.7	8
89	Direct Integration of Functional Structures on 3-D Microscale Surfaces by Laser Dynamic Forming. <i>Journal of Microelectromechanical Systems</i> , <b>2013</b> , 22, 1428-1437	2.5	3
88	Laser assisted electro-deposition of earth abundant Cu <sub>2</sub> ZnSnS <sub>4</sub> photovoltaic thin film. <i>Manufacturing Letters</i> , <b>2013</b> , 1, 54-58	4.5	8
87	Mechanism of fatigue performance enhancement in a laser sintered superhard nanoparticles reinforced nanocomposite followed by laser shock peening. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 133509	5.5	25



86	Electropulsing induced crystal orientation change and its effects on electric conductivity of nanofilms of ZnAl alloys. <i>Applied Physics A: Materials Science and Processing</i> , <b>2013</b> , 111, 1241-1245	2.6	6
85	The Investigation of Plasma Produced by Intense Nanosecond Laser Ablation in Vacuum Under External Magnetic Field Using a Two-Stage Model. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2013</b> , 135,	3.3	2
84	Magnetic Field Effects on Laser Drilling. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , <b>2013</b> , 135,	3.3	24
83	Direct pulsed laser crystallization of nanocrystals for absorbent layers in photovoltaics: Multiphysics simulation and experiment. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 193506	2.5	9
82	Laser and Photonic Systems Integration: Emerging Innovations and Framework for Research and Education. <i>Human Factors and Ergonomics in Manufacturing</i> , <b>2013</b> , 23, 483-516	1.4	4
81	Mechanism of Fatigue Performance Enhancement in a Superhard Nanoparticles Integrated Nanocomposites by a Hybrid Manufacturing Technique <b>2013</b> ,		2
80	Surface form memory in NiTi shape memory alloys by laser shock indentation. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 2088-2094	4.3	13
79	Room temperature deposition of alumina-doped zinc oxide on flexible substrates by direct pulsed laser recrystallization. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 151902	3.4	22
78	The mechanisms of thermal engineered laser shock peening for enhanced fatigue performance. <i>Acta Materialia</i> , <b>2012</b> , 60, 4997-5009	8.4	59
77	Laser assisted embedding of nanoparticles into metallic materials. <i>Applied Surface Science</i> , <b>2012</b> , 258, 2289-2296	6.7	13
76	Large scale, highly dense nanoholes on metal surfaces by underwater laser assisted hydrogen etching near nanocrystalline boundary. <i>Applied Surface Science</i> , <b>2012</b> , 258, 4254-4259	6.7	7
75	Scalable patterning on shape memory alloy by laser shock assisted direct imprinting. <i>Applied Surface Science</i> , <b>2012</b> , 258, 10042-10046	6.7	24
74	An eXtended Finite Element Method (XFEM) study on the effect of reinforcing particles on the crack propagation behavior in a metal matrix composite. <i>International Journal of Fatigue</i> , <b>2012</b> , 44, 151-156	11.5	44
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