

# Paul R Stoddart

## 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.

135  
papers

3,264  
citations

35  
h-index

53  
g-index

160  
ext. papers

3,827  
ext. citations

5.1  
avg, IF

5.43  
L-index

#	Paper	IF	Citations
135	Dual U-shaped fibers refractometer with enhanced sensitivity based on the coupling effect. <i>Optical Fiber Technology</i> , <b>2022</b> , 71, 102935	2.4	0
134	Response of primary auditory neurons to stimulation with infrared light in vitro. <i>Journal of Neural Engineering</i> , <b>2021</b> , 18, 046003	5	2
133	Avalanching nanoparticles bring new light to cardiovascular imaging. <i>Cardiovascular Research</i> , <b>2021</b> , 117, e60-e63	9.9	0
132	Viral-mediated transduction of auditory neurons with opsins for optical and hybrid activation. <i>Scientific Reports</i> , <b>2021</b> , 11, 11229	4.9	2
131	Photothermal release and recovery of mesenchymal stem cells from substrates functionalized with gold nanorods. <i>Acta Biomaterialia</i> , <b>2021</b> , 129, 110-121	10.8	0
130	Trends and Applications of U-Shaped Fiber Optic Sensors: A Review. <i>IEEE Sensors Journal</i> , <b>2021</b> , 21, 120-131	13.1	9
129	Nanoscale optical voltage sensing in biological systems. <i>Journal of Luminescence</i> , <b>2021</b> , 230, 117719	3.8	3
128	Quantifying end-face quality of cleaved fibers: Femtosecond laser versus mechanical scribing. <i>Optics and Laser Technology</i> , <b>2021</b> , 141, 107111	4.2	1
127	Combined optogenetic and electrical stimulation of auditory neurons increases effective stimulation frequency-an in vitro study. <i>Journal of Neural Engineering</i> , <b>2020</b> , 17, 016069	5	10
126	Critical Review of Transcutaneous Vagus Nerve Stimulation: Challenges for Translation to Clinical Practice. <i>Frontiers in Neuroscience</i> , <b>2020</b> , 14, 284	5.1	62
125	Patterning of biomaterials by aerosol jet printing: A parametric study. <i>Bioprinting</i> , <b>2020</b> , 18, e00081	7	6
124	Thermal damage threshold of neurons during infrared stimulation. <i>Biomedical Optics Express</i> , <b>2020</b> , 11, 2224-2234	3.5	4
123	Hybrid optogenetic and electrical stimulation for greater spatial resolution and temporal fidelity of cochlear activation. <i>Journal of Neural Engineering</i> , <b>2020</b> , 17, 056046	5	6
122	Tuning drug dosing through matching optically active polymer composition and NIR stimulation parameters. <i>International Journal of Pharmaceutics</i> , <b>2020</b> , 575, 118976	6.5	
121	Theoretical Model and Design Considerations of U-Shaped Fiber Optic Sensors: A Review. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 14578-14589	4	9
120	Nanomechanical Properties and Phase Behavior of Phenylalanine Amyloid Ribbon Assemblies and Amorphous Self-Healing Hydrogels. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 21992-22001	9.5	14
119	Electrical Cell Stimulation: Fabrication of a Biocompatible Liquid Crystal Graphene Oxide/Gold Nanorods Electro- and Photoactive Interface for Cell Stimulation (Adv. Healthcare Mater. 9/2019). <i>Advanced Healthcare Materials</i> , <b>2019</b> , 8, 1970036	10.1	

118	Fabrication of a Biocompatible Liquid Crystal Graphene Oxide-Gold Nanorods Electro- and Photoactive Interface for Cell Stimulation. <i>Advanced Healthcare Materials</i> , <b>2019</b> , 8, e1801321	10.1	12
117	Controlled release from PCL-alginate microspheres via secondary encapsulation using GelMA/HAMA hydrogel scaffolds. <i>Soft Matter</i> , <b>2019</b> , 15, 3779-3787	3.6	11
116	Internet of Things-based Hydrocarbon Sensing for Real-time Environmental Monitoring <b>2019</b> ,		4
115	Biological Considerations of Optical Interfaces for Neuromodulation. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1900385	8.1	9
114	Towards Safer Primers: A Review. <i>Technologies</i> , <b>2019</b> , 7, 75	2.4	3
113	Influence of the dielectric substrate on the effective optical constants of silver plasmonic films. <i>Applied Optics</i> , <b>2019</b> , 58, 6038-6044	1.7	1
112	Stimulation of Primary Auditory Neurons Mediated by Near-Infrared Excitation of Gold Nanorods. <i>Neuromethods</i> , <b>2018</b> , 25-38	0.4	0
111	. <i>Journal of Lightwave Technology</i> , <b>2018</b> , 36, 3999-4005	4	1
110	User-Centered Design of Wearable Assistive Devices for the Aging Population <b>2018</b> , 538-561		
109	Development of an optical fiber SERS microprobe for minimally invasive sensing applications <b>2018</b> ,		1
108	Polycaprolactone porous template facilitates modulated release of molecules from alginate hydrogels. <i>Reactive and Functional Polymers</i> , <b>2018</b> , 133, 29-36	4.6	6
107	From Fundamental toward Applied SERS: Shared Principles and Divergent Approaches. <i>Advanced Optical Materials</i> , <b>2018</b> , 6, 1800292	8.1	39
106	On the need for more realistic experimental conditions in laboratory-based microbiologically influenced corrosion testing. <i>International Biodeterioration and Biodegradation</i> , <b>2017</b> , 121, 97-106	4.8	19
105	Nano-rescaling of gold films on polystyrene: thermal management for SERS. <i>Nanoscale</i> , <b>2017</b> , 9, 690-6957.7		16
104	Wavelength and refractive index dependence of the geometrical enhancement in surface-enhanced Raman scattering. <i>Journal of Raman Spectroscopy</i> , <b>2017</b> , 48, 1182-1189	2.3	6
103	Gold Nanoparticles for Modulating Neuronal Behavior. <i>Nanomaterials</i> , <b>2017</b> , 7,	5.4	45
102	Raman spectroscopic identification of single bacterial cells at different stages of their lifecycle. <i>Vibrational Spectroscopy</i> , <b>2016</b> , 86, 81-89	2.1	20
101	Microstructural refinement of aluminium-zinc-silicon coated steels. <i>Surface and Coatings Technology</i> , <b>2016</b> , 306, 490-496	4.4	8

100	Influence of carbon steel grade on the initial attachment of bacteria and microbiologically influenced corrosion. <i>Biofouling</i> , <b>2016</b> , 32, 109-22	3.3	15
99	Analysis of defects patterned by femtosecond pulses inside KBr and SiO <sub>2</sub> glass. <i>Applied Physics A: Materials Science and Processing</i> , <b>2016</b> , 122, 1	2.6	12
98	Light-induced reflectivity transients in black-Si nanoneedles. <i>Solar Energy Materials and Solar Cells</i> , <b>2016</b> , 144, 221-227	6.4	12
97	Effective optical constants of anisotropic silver nanoparticle films with plasmonic properties. <i>Optics Letters</i> , <b>2016</b> , 41, 5495-5498	3	14
96	User-Centered Design of Wearable Assistive Devices for the Aging Population. <i>Advances in Medical Technologies and Clinical Practice Book Series</i> , <b>2016</b> , 130-153	0.3	
95	Effect of embedded optical fibres on the mechanical properties of cochlear electrode arrays. <i>Medical Engineering and Physics</i> , <b>2016</b> , 38, 155-62	2.4	5
94	Surface-enhanced Raman scattering: effective optical constants for electric field modelling of nanostructured Ag films <b>2016</b> ,		1
93	Electric field induced surface-enhanced Raman spectroscopy for multianalyte detection. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 7095-9	3.6	8
92	Infrared neural stimulation fails to evoke neural activity in the deaf guinea pig cochlea. <i>Hearing Research</i> , <b>2015</b> , 324, 46-53	3.9	46
91	Versatile SERS sensing based on black silicon. <i>Optics Express</i> , <b>2015</b> , 23, 6763-72	3.3	57
90	Black-CuO: surface-enhanced Raman scattering and infrared properties. <i>Nanoscale</i> , <b>2015</b> , 7, 18299-304	7.7	22
89	Statistically quantified measurement of an Alzheimer's marker by surface-enhanced Raman scattering. <i>Journal of Biophotonics</i> , <b>2015</b> , 8, 567-74	3.1	29
88	Black silicon as a platform for bacterial detection. <i>Biomicrofluidics</i> , <b>2015</b> , 9, 061101	3.2	7
87	Gold Nanorod-assisted Optical Stimulation of Neuronal Cells. <i>Journal of Visualized Experiments</i> , <b>2015</b> ,	1.6	7
86	Corrosion of carbon steel by sulphate reducing bacteria: Initial attachment and the role of ferrous ions. <i>Corrosion Science</i> , <b>2015</b> , 93, 48-57	6.8	72
85	Metallic nanoparticles for peripheral nerve regeneration: is it a feasible approach?. <i>Neural Regeneration Research</i> , <b>2015</b> , 10, 1065-6	4.5	11
84	Investigating Shape Comparison Tools for Benchmarking Differences in Product Appearance During Product Styling. <i>Smart Innovation, Systems and Technologies</i> , <b>2015</b> , 169-179	0.5	1
83	The optical fiber tip: an inherently light-coupled microscopic platform for micro- and nanotechnologies. <i>Advanced Materials</i> , <b>2014</b> , 26, 3798-820	24	129

82	Gold-nanorod-assisted near-infrared stimulation of primary auditory neurons. <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 1862-8	10.1	97
81	Inhibition or acceleration: Bacterial test media can determine the course of microbiologically influenced corrosion. <i>Corrosion Science</i> , <b>2014</b> , 86, 149-158	6.8	33
80	Parametric study of surface melting in zinc-aluminium coated steels. <i>International Journal of Surface Science and Engineering</i> , <b>2014</b> , 8, 124	1	4
79	Optical Stimulation of Neurons. <i>Current Molecular Imaging</i> , <b>2014</b> , 3, 162-177		65
78	Diffraction-limited ultrasensitive molecular nano-arrays with singular nano-cone scattering. <i>Biomicrofluidics</i> , <b>2014</b> , 8, 021101	3.2	7
77	Measurement of forces at the tip of a cochlear implant during insertion. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2014</b> , 61, 1177-86	5	17
76	Optical Fibers: The Optical Fiber Tip: An Inherently Light-Coupled Microscopic Platform for Micro- and Nanotechnologies (Adv. Mater. 23/2014). <i>Advanced Materials</i> , <b>2014</b> , 26, 3797-3797	24	2
75	Nanoparticle-enhanced infrared neural stimulation. <i>Journal of Neural Engineering</i> , <b>2014</b> , 11, 065002	5	26
74	Laser exposure of gold nanorods can induce intracellular calcium transients. <i>Journal of Biophotonics</i> , <b>2014</b> , 7, 761-5	3.1	53
73	Novel aluminum near field transducer and highly integrated micro-nano-optics design for heat-assisted ultra-high-density magnetic recording. <i>Nanotechnology</i> , <b>2014</b> , 25, 295202	3.4	6
72	Nanofabrication of surface-enhanced Raman scattering substrates for optical fiber sensors <b>2013</b> ,		1
71	Improved methods for fluorescence background subtraction from Raman spectra. <i>Journal of Raman Spectroscopy</i> , <b>2013</b> , 44, 1587-1595	2.3	72
70	Additional enhancement of electric field in surface-enhanced Raman Scattering due to Fresnel mechanism. <i>Scientific Reports</i> , <b>2013</b> , 3, 2335	4.9	45
69	The Effect of the Cladding Refractive Index on an Optical Fiber Evanescent-Wave Sensor. <i>Journal of Lightwave Technology</i> , <b>2013</b> , 31, 3251-3257	4	8
68	Temperature measurement in the microscopic regime: a comparison between fluorescence lifetime- and intensity-based methods. <i>Journal of Microscopy</i> , <b>2013</b> , 250, 179-88	1.9	30
67	Laser exposure of gold nanorods can increase neuronal cell outgrowth. <i>Biotechnology and Bioengineering</i> , <b>2013</b> , 110, 2277-91	4.9	72
66	In situ SERS probing of nano-silver coated individual yeast cells. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 49, 536-41	11.8	45
65	Plasmonic properties of gold nanoparticles can promote neuronal activity <b>2013</b> ,		6

64	Microfluidics and Raman microscopy: current applications and future challenges. <i>Chemical Society Reviews</i> , <b>2013</b> , 42, 5880-906	58.5	149
63	Surface-enhanced Raman scattering sensing on black silicon. <i>Annalen Der Physik</i> , <b>2013</b> , 525, 907-914	2.6	49
62	Infrared Neural Stimulation: Influence of Stimulation Site Spacing and Repetition Rates on Heating. <i>IEEE Transactions on Biomedical Engineering</i> , <b>2013</b> , 60, 3534-41	5	31
61	Infrared nerve stimulation: modelling of photon transport and heat conduction <b>2013</b> ,		1
60	Optical fibers for miniaturized surface-enhanced Raman-scattering probes. <i>Applied Optics</i> , <b>2013</b> , 52, 8388-93	9.3	13
59	Whole cell patch clamp for investigating the mechanisms of infrared neural stimulation. <i>Journal of Visualized Experiments</i> , <b>2013</b> ,	1.6	5
58	Modeling of the temporal effects of heating during infrared neural stimulation. <i>Journal of Biomedical Optics</i> , <b>2013</b> , 18, 035004	3.5	36
57	Effects of laser-exposed gold nanorods on biochemical pathways of neuronal cells <b>2013</b> ,		2
56	The effect of metal microstructure on the initial attachment of Escherichia coli to 1010 carbon steel. <i>Biofouling</i> , <b>2013</b> , 29, 939-52	3.3	17
55	Nano-cone optical fiber array sensors for MiRNA profiling <b>2013</b> ,		2
54	Ultra-pure, water-dispersed Au nanoparticles produced by femtosecond laser ablation and fragmentation. <i>International Journal of Nanomedicine</i> , <b>2013</b> , 8, 2601-11	7.3	18
53	Influence of electric field on SERS: frequency effects, intensity changes, and susceptible bonds. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 4646-53	16.4	36
52	Origins of Spectral Changes in Fiber Bragg Gratings Due to Macrobending. <i>Journal of Lightwave Technology</i> , <b>2012</b> , 30, 3500-3511	4	10
51	Laser fabricated ripple substrates for surface-enhanced Raman scattering. <i>Annalen Der Physik</i> , <b>2012</b> , 524, L5-L10	2.6	59
50	Modeling of light absorption in tissue during infrared neural stimulation. <i>Journal of Biomedical Optics</i> , <b>2012</b> , 17, 075002	3.5	43
49	Active control of silver nanoparticles spacing using dielectrophoresis for surface-enhanced Raman scattering. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 4029-35	7.8	56
48	Light enhancement in surface-enhanced Raman scattering at oblique incidence. <i>Photonic Sensors</i> , <b>2012</b> , 2, 283-288	2.3	14
47	Collection efficiency of scattered light in single-ended optical fiber sensors. <i>Optics Letters</i> , <b>2012</b> , 37, 2142-4	3	10

46	Modeling of bend effects on fiber Bragg gratings <b>2012</b> ,		1
45	Optical fiber sensor based on oblique angle deposition. <i>Applied Optics</i> , <b>2011</b> , 50, 155-62	0.2	25
44	Effect of substrate temperature on the splat formation of flame sprayed polypropylene. <i>Surface and Coatings Technology</i> , <b>2011</b> , 206, 1180-1187	4.4	8
43	Sub-15nm optical fiber nanoimprint lithography: A parallel, self-aligned and portable approach. <i>Advanced Materials</i> , <b>2011</b> , 23, 531-5	24	54
42	Dielectrophoresis-Raman spectroscopy system for analysing suspended nanoparticles. <i>Lab on A Chip</i> , <b>2011</b> , 11, 921-8	7.2	46
41	Molecular Imaging of Red Blood Cells by Raman Spectroscopy. <i>Australian Journal of Chemistry</i> , <b>2011</b> , 64, 593	1.2	8
40	Changes in spectral properties of fibre Bragg gratings owing to bending. <i>Electronics Letters</i> , <b>2011</b> , 47, 558	1.1	5
39	Angle cleaving optical fibers using a CO2 laser <b>2010</b> ,		1
38	Trace Level Detection of Water Contamination by SERS <b>2010</b> ,		1
37	Distributed Fluorescence Sensing Using Exposed Core Microstructured Optical Fiber. <i>IEEE Photonics Technology Letters</i> , <b>2010</b> , 22, 1385-1387	2.2	23
36	Analysis of transmission mode of a matched fiber Bragg grating interrogation scheme. <i>Applied Optics</i> , <b>2010</b> , 49, 4498-505	0.2	11
35	Characterization of time-resolved fluorescence response measurements for distributed optical-fiber sensing. <i>Applied Optics</i> , <b>2010</b> , 49, 6385-90	0.2	8
34	Nanostructured optical fibre arrays for high-density biochemical sensing and remote imaging. <i>Analytical and Bioanalytical Chemistry</i> , <b>2010</b> , 396, 53-71	4.4	48
33	Differences in colonisation of five marine bacteria on two types of glass surfaces. <i>Biofouling</i> , <b>2009</b> , 25, 621-31	3.3	58
32	A low-cost and temperature-insensitive fibre Bragg grating sensor for monitoring localized strain concentrations. <i>Measurement Science and Technology</i> , <b>2009</b> , 20, 025201	2	1
31	Nanoimprinted optical fibres: Biotemplated nanostructures for SERS sensing. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 1531-5	11.8	114
30	Optical fibre SERS sensors. <i>Analytical and Bioanalytical Chemistry</i> , <b>2009</b> , 394, 1761-74	4.4	73
29	Escherichia coli, Pseudomonas aeruginosa, and Staphylococcus aureus attachment patterns on glass surfaces with nanoscale roughness. <i>Current Microbiology</i> , <b>2009</b> , 58, 268-73	2.4	189

28	Confocal fluorescence polarization microscopy for linear unmixing of spectrally similar labels. <i>Micron</i> , <b>2009</b> , 40, 212-7	2.3	6
27	Synthesis of Self-Assembled Island-Structured Complex Oxide Dielectric Films. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 16610-16614	3.8	2
26	Nano-structured surfaces control bacterial attachment <b>2008</b> ,		8
25	Nanostructured optical fibre for surface-enhanced Raman scattering sensing <b>2008</b> ,		1
24	Fluorescence-based distributed chemical sensing for structural health monitoring <b>2008</b> ,		2
23	Nanoimprinting on optical fiber end faces for chemical sensing <b>2008</b> ,		4
22	First-approximation simulation of dopant diffusion in nanostructured silica optical fibres. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , <b>2008</b> , 6, 167-177	2.6	5
21	Impact of nano-topography on bacterial attachment. <i>Biotechnology Journal</i> , <b>2008</b> , 3, 536-44	5.6	146
20	Fabrication of a range of SERS substrates on nanostructured multicore optical fibres. <i>Journal of Raman Spectroscopy</i> , <b>2007</b> , 38, 377-382	2.3	40
19	Analysis of structured highlight stereo imaging for shape measurement of specular objects. <i>Optical Engineering</i> , <b>2007</b> , 46, 083601	1.1	1
18	Optical properties of chitin: surface-enhanced Raman scattering substrates based on antireflection structures on cicada wings. <i>Nanotechnology</i> , <b>2006</b> , 17, 680-686	3.4	82
17	Health monitoring of bonded composite repairs using fibre optic sensors <b>2006</b> ,		1
16	Strain-based health assessment of bonded composite repairs. <i>Composite Structures</i> , <b>2006</b> , 76, 234-242	5.3	26
15	Evanesciently coupled dewpoint sensor based on a silicon waveguide. <i>Sensors and Actuators A: Physical</i> , <b>2006</b> , 128, 225-229	3.9	4
14	Reduction of polarization-induced artifacts in grating-based spectrometers. <i>Applied Optics</i> , <b>2005</b> , 44, 6123-30	1.7	5
13	Nanostructured optical fiber with surface-enhanced Raman scattering functionality. <i>Optics Letters</i> , <b>2005</b> , 30, 598-600	3	56
12	Fibre optic distributed temperature sensor with an integrated background correction function. <i>Measurement Science and Technology</i> , <b>2005</b> , 16, 1299-1304	2	24
11	MEMS micropump characterization and control utilizing a fibre optic Interferometer <b>2002</b> , 4935, 395		



10	Chemical sensors based on nanoparticle arrays <b>2002</b> , 4934, 61		2
9	High-temperature elastic properties of a nickel-based superalloy studied by surface Brillouin scattering. <i>Journal of Physics Condensed Matter</i> , <b>2001</b> , 13, 2281-2294	1.8	25
8	Surface Brillouin scattering of opaque solids and thin supported films. <i>Ultrasonics</i> , <b>2000</b> , 38, 450-8	3.5	20
7	Quasielastic light scattering in silicon. <i>Physical Review B</i> , <b>2000</b> , 62, 15383-15385	3.3	7
6	Accumulation of radioactive corrosion products on steel surfaces of VVER type nuclear reactors. I. 110mAg. <i>Journal of Nuclear Materials</i> , <b>1999</b> , 265, 273-284	3.3	36
5	Surface Brillouin scattering study of the surface excitations in amorphous silicon layers produced by ion bombardment. <i>Physical Review B</i> , <b>1998</b> , 58, 13677-13685	3.3	85
4	High-temperature studies of surface acoustic wave velocities in silicon by Brillouin scattering. <i>Physica B: Condensed Matter</i> , <b>1996</b> , 219-220, 717-719	2.8	11
3	Brillouin-scattering measurements of surface-acoustic-wave velocities in silicon at high temperatures. <i>Physical Review B</i> , <b>1995</b> , 51, 17574-17578	3.3	27
2	High-temperature elastic constants of yttrium aluminum garnet. <i>Journal of Applied Physics</i> , <b>1993</b> , 73, 7298-7301	2.5	35
1	Pronounced anharmonicity in the classical high-Tc superconductor Nb <sub>3</sub> Sn. <i>Physica C: Superconductivity and Its Applications</i> , <b>1990</b> , 167, 415-422	1.3	6