



## *MRS Advances* Special Issue

Issue Date: Summer 2020

Submission Deadline: August 31, 2020

# Materials advances in application to COVID-19 related challenges

With rapid efforts underway to address both the science of, and engineering solutions to, the current COVID-19 pandemic, *MRS Advances* is pleased to offer a forum for the research community to provide quick snapshots of materials and biomaterials research related to this globally important problem. The editors seek papers that relate to materials processing, design, and performance for personal protective equipment, diagnostic techniques made possible from advances in materials and interfaces, bioactive surfaces, and the interaction of materials with viruses.

### Contributing papers are solicited in the following areas:

- Optical and electrochemical platforms for rapid COVID-19 detection
- Adhesion and bioactivity of viruses on surfaces
- Antiviral materials
- Disinfection devices: design, manufacturing and validation (modeling and predictions)
- Structure–property relationships, air and droplet management, and effectiveness of mask materials

### GUEST EDITORS

**Susana Diaz**, Bayer Innovation Center, USA

**Roger Narayan**, University of North Carolina/North Carolina State University, USA

**Lia Stanciu-Gregory**, Purdue University, USA

### Manuscript Submission:

*MRS Advances* is a rapid publication journal, using an all-digital publishing method to release short (~2500 words plus figures) papers as quickly as possible after peer review and acceptance.

Manuscripts must be submitted via the *MRS Advances* electronic submission system by **August 31, 2020**. Please select “*Materials advances in application to COVID-19 related challenges*” as the manuscript type. Papers will be published online once accepted, and the final issue will be available by November 15, 2020. For submission information and the template used for submission, please see [mrs.org/mrs-advances-manuscript-instructions](https://mrs.org/mrs-advances-manuscript-instructions).

All manuscripts will be reviewed in a normal but expedited fashion. Papers submitted by the deadline and subsequently accepted will be published in the Special Issue. Other manuscripts that are acceptable but cannot be included in the issue will be scheduled for publication in a subsequent issue of *MRS Advances*.

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Please contact [mrsadvances@mrs.org](mailto:mrsadvances@mrs.org) with any questions.



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55 Cs 132.9054 Cesium	56 Ba 137.327 Barium	57 La 138.90547 Lanthanum	72 Hf 178.48 Hafnium	73 Ta 180.9488 Tantalum	74 W 183.84 Tungsten	75 Re 186.207 Rhenium	76 Os 190.23 Osmium	77 Ir 192.217 Iridium	78 Pt 195.084 Platinum	79 Au 196.966569 Gold	80 Hg 200.59 Mercury	81 Tl 204.3833 Thallium	82 Pb 207.2 Lead	83 Bi 208.9804 Bismuth	84 Po (209) Polonium	85 At (210) Astatine	86 Rn (222) Radon
87 Fr 87.0001 Francium	88 Ra (226) Radium	89 Ac (227) Actinium	104 Rf (261) Rutherfordium	105 Db (262) Dubnium	106 Sg (263) Seaborgium	107 Bh (264) Bohrium	108 Hs (270) Hassium	109 Mt (270) Meitnerium	110 Ds (281) Darmstadtium	111 Rg (280) Roentgenium	112 Cn (285) Copernicium	113 Nh (284) Nihonium	114 Fl (289) Flerovium	115 Mc (288) Moscovium	116 Lv (293) Livermorium	117 Ts (294) Tennessine	118 Og (294) Oganesson

58 Ce 140.116 Cerium	59 Pr 140.90768 Praseodymium	60 Nd 144.242 Neodymium	61 Pm (145) Promethium	62 Sm 150.36 Samarium	63 Eu 151.964 Europium	64 Gd 157.25 Gadolinium	65 Tb 158.92535 Terbium	66 Dy 162.5 Dysprosium	67 Ho 164.93032 Holmium	68 Er 167.259 Erbium	69 Tm 168.93421 Thulium	70 Yb 173.054 Ytterbium	71 Lu 174.9668 Lutetium
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